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Final Removal Action Report

Mansfield Trail Dump Site
Stanhope-Sparta Rd
Byram Township, Sussex County, New Jersey

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Removal Action Activity Report Mansfield Trail Dump Site

Executive Summary

The Mansfield Trail Dump Site (the Site) in Stanhope, New Jersey has been identified as a source of volatile organic compound (VOC) contamination, specifically trichloroethylene (TCE). The contamination is suspected to be the result of septic and other industrial wastes disposed in constructed trenches from the late 1950's to the early 1970's. Investigation of the Site in 2004 was initiated by the New Jersey Department of Environmental Protection (NJDEP) after TCE was detected in nearby residential drinking water wells. On October 16, 2009, the NJDEP submitted a request to the United States Environmental Protection Agency (EPA) Emergency and Remedial Response Division (ERRD), to evaluate the Site for a Removal Action under the Comprehensive, Response, Compensation, and Liability Act of 1980, as amended (CERCLA). The EPA Removal Action Branch (RAB), Removal Assessment and Enforcement Section, performed a Removal Site Evaluation (RSE) and concluded a CERCLA Removal Action was warranted to address the threats posed by the former waste disposal areas (i.e., trenches) at the Site. In May 2011 the Site was listed on the National Priorities List (NPL). On September 29, 2011, an Action Memorandum was approved for the excavation and off-Site disposal of TCE contaminated soil at the Site.

From February 21 to May 30, 2012, the EPA-RAB completed the excavation and off-site disposal of the source areas of TCE contamination utilizing the services of the Emergency and Rapid Response Services (ERRS) contractor, United States Coast Guard (USCG) Strike Team, and the Removal Support Team 2 (RST 2) contractor at the Site from the waste trenches on site, identified as Dump Areas A, B, C, D, and E. Approximately 11,170 tons of non-hazardous waste, 224 tons of hazardous D040 waste meeting treatment, and 159 tons of hazardous D040 waste exceeding treatment according to the CERCLA was removed and transported to CERCLA off-site approved disposal facilities meeting Resource Recovery and Response Act (RCRA) guidelines. The excavation depths of Dump Areas A, B, D and E were taken to bedrock. Selected post confirmation soil sampling was performed from limited soil amounts in bedrock crevasses in Dump Areas A, B and D which indicated that the contaminated waste material was removed from these areas. Dump Area C was pre-delineated with a 50-foot grid taking 60 soil samples and the results indicated contamination was not present that required further action. In accordance with the Site-Specific Community Air Monitoring Plan (CAMP), RST 2 and the USCG performed on-site air monitoring and air sampling to ensure off-site migration of VOCs did not occur during excavation activities. After the completion of excavation activities the Site was re-graded and restored as close as possible to former conditions.

1.0 Introduction

This report summarizes the Removal Action conducted at the Mansfield Trail Dump Site (the Site) located in Stanhope, New Jersey from February 21 to May 30, 2012. The Site is the suspected source of volatile organic compound (VOC) contamination, specifically trichloroethene (TCE), that has migrated to the local groundwater aquifer and impacted neighboring drinking water sources. The United States Environmental Protection Agency Removal Action Branch (EPA-RAB) was tasked with the removal of this TCE source area utilizing the services of the Emergency and Rapid Response Services (ERRS) contract, United States Coast Guard (USCG) Strike Team, and the Removal Support Team 2 (RST 2) contract.

1.1 Site Location

The Site is located along an undeveloped wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed rail road overpass, in Stanhope, Sussex County, New Jersey. The Site is approximately 15.3 acres consisting of two parcels of undeveloped land (Block 365.06, lots 23 and 24) at latitude 40.9289443 and longitude -74.6995999. Five areas within the Site have been identified as areas of concern and are referred to as Dump Areas (i.e., trench areas) A, B, C, D, and E. Refer to Attachment A-1 Figure 1 - Site Location Map and Figure 2 - Site Overview Map.

The Site is bound to the north, south and west by upland woods, and by a former rail line to the east. The area around the Site is primarily residential. The nearest residences are located approximately 400 feet north-west of the Site from Dump Area A. Portions of Dump Areas B and C border a wetlands area in the southern end of the Site, which is seasonally flooded depending on precipitation levels. This area is fed by intermittent flow from the south and drainage from the ridge to the west from drainage culverts that lead to the former rail line ravine. A 500 kilovolt (kV) high tension transmission power line right-of-way passes through the middle of the Site in Dump Area D. An estimated 384 people reside within 0.5 miles of the Site and a high school is approximately 2,000 feet to the south of the Site.

1.2 Site History

The Site was used as a dump for septic wastes from the late 1950's to the early 1970's. Most of the waste disposal appears to have taken place in trenches. The New Jersey Department of Environmental Protection (NJDEP) submitted a request to the EPA Emergency and Remedial Response Division on October 16, 2009, to evaluate the Site for a Removal Action under the Comprehensive, Response, Compensation, and Liability Act of 1980 (CERCLA).

The EPA-RAB, Removal Assessment and Enforcement Section performed a Removal Site Evaluation (RSE) and concluded a CERCLA Removal Action was warranted to address the threats posed by the former waste disposal areas (i.e., trenches) at the Site. The contaminated waste and soil present within these areas is a continual source of VOC contamination. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into shallow aquifer at the Site above the Maximum Contaminant Levels (MCLs). The Comprehensive Environmental Responses, Compensation, and Liability Information System ID number is NJN000206345.

TCE contamination was first discovered in a home on Brookwood Road during a potable water test in 2004. The Sussex County Health Department and NJDEP subsequently sampled approximately 75 private wells in multiple

rounds. The testing revealed 18 wells along Brookwood and Ross Roads had TCE concentrations above the state drinking water standard. The highest concentration of TCE detected in a water sample was 110 parts per billion (ppb). As part of the investigation to identify the source of the contamination at Brookwood Road, the NJDEP discovered several potential dump areas on two vacant adjacent properties while reviewing historical aerial photography. The NJDEP identified and labeled four suspected dumping areas as Areas A through D. The NJDEP collected three soil samples at the Site, one each from Dump Areas A, B, and D in September 2009. A sludge-like material was encountered and elevated concentrations of TCE at 20,300 parts per million (ppm) and other VOCs, such as cis-1,2-dichloroethylene, 1,2-dichlorobenzene, toluene and chlorobenzene were identified with the highest concentrations detected in the upper trench of Dump Area A. It has been documented through on-site monitoring wells that the former disposal areas have impacted the groundwater at the Site. The CERCLA hazardous substances that have been detected in the monitoring wells at the Site were identified and are the same as those in the former waste disposal areas. The impacted bedrock aquifer beneath the Site supplies residential wells down-gradient of the Site. Analysis of groundwater samples first collected in 2004 from residential wells located approximately 400 feet from the Site has revealed that the closest down-gradient residential wells to the Site have been impacted by the migration of the same contaminants from the former waste disposal areas. In the beginning of 2005, the NJDEP funded and installed point-of-entry treatment systems (POETs) in 17 of the residences. Subsequent indoor air sampling also revealed TCE contamination in several homes from vapor intrusion. The NJDEP installed sub-slab depressurization systems (SDS) in five residences to address potential impact to indoor air. The NJDEP continues to perform operation and maintenance of the SDS systems and to monitor the drinking water and vapor in the area.

In 2010, EPA personnel and contractor representatives from the EPA Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). During May and June 2010, EPA collected soil and waste samples throughout the Site. The effort included the collection of nearly 100 samples at varying depths throughout the disposal areas of the Site, including within and around the trenches for purposes of horizontal delineation. The delineation boundary soils samples collected in Dump Area D during the May and June 2010 IA sampling events are referenced in Attachment B-1 - Figure 8 and Attachment B-2 - Tables 7 and 8, and were used during the 2012 Removal Action for the boundary limits of Dump Area D.

The results of sampling and analysis identified the presence of CERCLA hazardous substances, specifically TCE. A number of composite samples collected from within the trenches identified material which exceeded the Resource Conservation and Recovery Act (RCRA) Toxic Characteristic Leaching Procedure (TCLP) regulatory level for TCE of 500 micrograms per kilogram ($\mu\text{g/kg}$).

2.0 Removal Action Scope of Work

The objectives of the Removal Action at the Site were to prevent and/or minimize human exposure to contaminants in the areas of concern through contact with contaminated groundwater, soil and inhalation of VOC contaminants, and to prevent and/or minimize the migration of contaminants in surface soil, surface water and groundwater.

2.1 ERRS Scope of Work

The ERRS contractor completed the following activities in order to achieve the above stated Removal Action objectives for the Site: Established a support zone, contamination zone and exclusion zone; located all underground utilities; developed and finalized work and safety plans; obtained subcontractors to provide the

following: utility services, heavy equipment, transportation and disposal and laboratory services; restored the Site to original conditions; cleared the Site of extraneous debris and general site preparation; implemented access controls to prevent unauthorized access to the Site; installed a temporary access roads for access of heavy equipment to the excavation areas; prepared a soil staging area and the management of contaminated materials to prevent releases to the environment during excavation, stockpiling, handling and transportation of contaminated materials; collected samples for waste characterization; excavated Dump Areas A, B, C, D and E; transported waste off-site; and regarded and restored site landscape to conditions conducive to a wooded area.

2.2 USCG Scope of Work

USCG assisted RST 2 with the on-site air monitoring activities. Daily weather information obtained from the weather pack station deployed by the USCG on site was used to determine optimum monitoring locations. USCG remotely monitored AreaRAE® units from the site trailer and assisted with routine site walks for ERRS contractor health and safety during operations. The AreaRAE® units were used to monitor the following parameters: VOCs, hydrogen sulfide (H₂S), carbon monoxide (CO) in ppm and the lower explosive limits (LEL) and oxygen (O₂) in percent (%).

2.3 RST 2 Scope of Work

As part of the Removal Action, RST 2 completed the following tasks: documented on-site activities; conducted oversight of air monitoring activities by USCG; conducted oversight of ERRS waste characterization soil sampling and conducted pre-delineation and post confirmation soil sample and air sample collection and sample/data management.

3.0 Removal Action Phases

The following is an overview of the Removal Action Activities that occurred in each dump area of the Site from initiation to completion of site work. Attachment A provides further detail of site activities structured by day. Refer to Figures in Attachment A for Dump Area Locations Map and Excavation Boundaries Map. Refer to Attachment B for the photographic log sectioned by dump areas.

3.1 Pre-Excavation Phase

3.1.1 Vegetation and Debris Removal

Dump Area A: From February 21 to March 6, 2012, ERRS cleared and chipped vegetation and removed debris covering the area of excavation, as well as re-graded the slope from the upper trench to the lower trench of Dump Area A in order that the area could be excavated in a safe manner.

Dump Area B: From March 21 to 24, 2012, ERRS cleared and chipped wooded debris to prepare area for material excavation and removal.

Dump Area E: From February 15 to 22, 2012, ERRS cleared trees from Dump Area E. From March 5 to 7, 2012, ERRS graded and prepared Dump Area E for staging of hazardous and non-hazardous waste. Two silt fences were installed to prevent run off from excavated stock piled material.

Refer to the following Attachments: Attachment A, Removal Activities and Air Monitoring Report.

3.1.2 Waste Characterization Sampling

Dump Area A: On February 24, 2012, ERRS collected waste characterization samples. A total of four five-point composite samples were collected from the Lower Trench and three five-point composite samples were collected from the Upper Trench. On March 6, 2012, as directed by the EPA On-Scene Coordinator (OSC), ERRS flagged the Upper and Lower Trenches to designate the areas with hazardous and non-hazardous material based on the analytical results from the samples collected. All sample points were flagged and Global Positioning System (GPS) points taken.

Dump Area B: ERRS sampled Dump Area B on February 22, 2012. A total of three five-point composite samples were collected from the single trench in this area. The ERRS contractor collected the samples and RST 2 provided oversight. On March 6, 2012, as directed by the OSC, ERRS flagged the hazardous and non-hazardous material areas in Dump Area B based on the analytical results from the samples collected. All sample points were flagged and GPS points taken.

Dump Area C: ERRS sampled Dump Area C on February 22, 2012. One five-point composite sample was collected from this area. The ERRS contractor collected the samples and RST 2 provided oversight. All sample points were flagged and GPS points taken.

Dump Area D: ERRS sampled Dump Area D on March 2, 2012. A total of 20 five-point composite samples were collected from Trenches 1, 2, 3 and 4. The ERRS contractor excavated test pits and collected the samples and RST 2 provided oversight. Material in Trenches 1, 3 and 4 in Dump Area D contained non-hazardous material according to the analytical results. Trench 2 contained sulfide reactive material and was stockpiled and disposed in separate loads from the non-hazardous material. All sample points were flagged and GPS points taken.

Dump Area E: ERRS sampled Dump Area E on February 24, 2012. A total of nine five-point composite samples were collected from Trenches 1, 2, and 3. All sample points were flagged and GPS points taken. On March 6, 2012, as directed by the OSC, ERRS flagged the the northern and southern sections of Dump Area E to designate the areas with hazardous and non-hazardous material based on the analytical results from the samples collected.

Refer to the following Attachments:

Attachment A, Removal Activities and Air Monitoring Report

Attachment B, Pre-Delineation/Post-Confirmation/Waste Characterization Soil Sample Trip Report

Section 3: Waste Characterization Test Pit Sampling

Attachment B-1:

Figure 9: Waste Characterization Test Pit Locations

3.1.3 Pre-Delineation Sampling:

Dump Area C: From March 12 to 14, 2012, RST 2 collected a total of 59 discrete soil samples, including three field duplicates, from a 50 foot (ft) grid of Dump Area C to evaluate the area's removal eligibility and delineation of its excavation boundary. The analytical results for these soil samples were below the criteria contaminant concentrations listed on the NJDEP Site Remediation Soil Cleanup Standards for soils which have impact to groundwater. The OSC determined by the analytical results that Dump Area C did not contain soil

contaminants which warranted removal in this area. No further action was taken in this area of the Site. See Attachment B for the Soil Sampling Trip Report for more details.

Dump Area E: On March 29, 2012, RST 2 collected a total of 20 soil samples, including one field duplicate, from the perimeter boundary of Dump Area E as directed by the OSC to confirm the boundary of this area. All samples collected from the perimeter of Dump Area E were below action levels for the target compound, TCE, and did not warrant further excavation as directed by the OSC.

Refer to the following Attachments:

Attachment A, Removal Activities and Air Monitoring Report

Attachment B, Pre-Delineation/Post-Confirmation/Waste Characterization Soil Sample Trip Report

Section 1: Pre-Delineation Soil Sampling.

Attachment B-1:

Figure 4 - Dump Area C Pre-Delineation Sample Locations

Figure 5 - Dump Area E Pre-Delineation Sample Locations

3.2 Excavation Phase:

Dump Area A: On March 8, 2012, ERRS removed approximately 100 yards of hazardous material from the Upper Trench of Dump Area A and approximately 30 yards of hazardous material from the Lower Trench of Dump Area A. The designated hazardous material was stockpiled at the north section of Dump Area E. From March 12 to 14, 2012, ERRS removed approximately 150 yards of non-hazardous material from the Upper Trench of Dump Area A and approximately 80 yards of non-hazardous material from the Lower Trench of Dump Area A. The designated non-hazardous material was stockpiled at the south section of Dump Area E. All excavation was completed to bedrock.

Dump Area B: On March 7, 2012, a total of 80 yards of hazardous material was removed from Dump Area B and stockpiled in the north section of Dump Area E. After the removal of the hazardous material from the trench in Dump Area B, an earthen berm was created between the excavated area and the area containing the non-hazardous material. Between March 14 and 15, 2012, a sump was installed in the trench to de-water the remaining material. From March 21 to 23, 2012, approximately 100 yards of non-hazardous waste was removed from the trench and stockpiled in the south section of Dump Area E. On March 23, 2012, ERRS removed the earthen berm and completed removal from this area. All excavation was completed to bedrock.

Dump Area D: Trench 4 was excavated to bedrock from March 26 to 27, 2012. Trench 3 was excavated from March 28 to April 18, 2012. Trench 2 was excavated from April 21 to May 11, 2012. Trench 1 and lower Dump Area D, near roadway, was excavated from May 8 to 23, 2012. All material was stockpiled in the south section of Dump Area E. The excavator operator separated sulfide reactive containing non-hazardous material from non-sulfide reactive containing non-hazardous material based on previous sampling results.

Dump Area E: From March 8 to May 21, 2012, Dump Area E was used as a staging area for the hazardous and non-hazardous materials stockpiles. From May 16 to 21, 2012, ERRS excavated to bedrock (approximately two to three feet of material) where the non-hazardous material stockpile was located and excavated approximately 4 to 7 feet where the hazardous waste stockpile was located in Dump Area E.

Refer to the following Attachment: Attachment A, Removal Activities and Air Monitoring Report.

3.3 Load-Out Phase:

From March 22 to May 21, 2012, ERRS transported the following loads per day of non-hazardous and hazardous material off-site by American Waste Management Services, Inc. and Corbett Management.

Table 3-1: Non-hazardous Waste Materials Inventory

Waste Service Company	Waste Type	Date	Loads per day	Tons per day
American Waste Management Services, Inc.	Non-hazardous Soil and debris	3/22/12	9	203.84
		3/23/12	15	347.85
		3/26/12	15	325.59
		3/27/12	14	330.16
		3/28/12	24	532.70
		3/29/12	15	361.26
		3/30/12	25	580.74
		4/02/12	24	559.42
		4/03/12	20	458.06
		4/04/12	25	592.87
		4/09/12	15	349.28
		4/10/12	11	241.33
		4/13/12	4	93.80
Corbett Management		5/07/12	30	683.64
		5/08/12	38	917.56
		5/09/12	37	883.17
		5/10/12	37	869.98
		5/14/12	33	808.76
		5/16/12	21	478.46
		5/17/12	39	976.77
		5/18/12	23	555.21
5/21/12		1	20.47	
Total		22 days	216	11,170.92

Table 3-2: Hazardous Waste Materials Inventory

Waste Service Company	Waste Type	Date	Loads per day	Tons per day
American Waste Management Services, Inc.	Hazardous D040 Soil Meeting Treatment	5/04/12	7	171.09
		5/21/12	2	52.72
	Total	2 days	9	223.81
	Hazardous D040 Soil Exceeding Treatment	5/07/12	6	158.72

3.4 Post-Excavation Phase:

3.4.1 Post-Confirmation Soil Sampling:

Dump Area A: On March 15 and 16, 2012, RST 2 collected a total of 13 soil samples, including one field duplicate, from the Lower Trench of Dump Area A perimeter and 28 soil samples, including one field duplicate, from the Upper Trench of Dump Area A perimeter for post excavation confirmation. In the Upper Trench of Dump Area A, the following sample was above the 1,000 µg/kg action level for TCE: S-129-3033-001 (6,600 µg/kg). The following samples were within 10% of the action limit and were also removed: S-131-2223-001 (190 µg/kg) and S-132-4041-001 (250 µg/kg). On April 19, 2012, the ERRS crew removed soil at these sample location points to bedrock. In the process of removing these sample points, a black waste material was discovered at the edge of the excavated area which was chased and excavated to bedrock.

Refer to the following Attachments:

Attachment B-1:

Figure 6 - Dump Area A Post-Confirmation Sample Locations Map for the re-excavated portion of the upper trench in Dump Area A.

Dump Area B: On March 27, 2012, RST 2 collected a total of 21 soil samples, including one field duplicate, from the trench in Dump Area B. The following sample locations were above the 1,000 µg/kg action level for TCE: S-136, S-142 and S-145. On April 25, 2012, ERRS removed additional soil around these sample locations to bedrock.

Dump Area D: On March 28, 2012, RST 2 collected a total of 11 soil samples, including one field duplicate, from Trench 4 of Dump Area D. All samples collected from Trench 4 were below the action levels and did not warrant further excavation as directed by the OSC. Post-confirmation soil samples were not able to be collected from Trench 1 through Trench 3. The excavation in these trenches were taken to bedrock, approximately 10 to 18 feet in depth, and extended in the area of excavation until virgin soil was reached at the perimeter. The delineation boundary soils samples collected in Dump Area D during the May and June 2010 IA sampling events are referenced in Attachment B-1, Figure 8, Dump Area D Post Confirmation Sampling and were used during the

2012 Removal Action for the boundary limits of Dump Area D.

Refer to the following Attachments:

Attachment B, Pre-Delineation/Post-Confirmation/Waste Characterization Soil Sample Trip Report
Section 2: Post-Confirmation Soil Sampling

3.4.2 Backfilling and Grading:

Dump Area A: Backfilling and grading of Dump Area A occurred on April 20, 24 and 25, 2012. Clean material from the area was re-graded and the slope area leveled in the Upper Trench. The Lower Trench was re-graded and on-site boulders were used to stabilize the slope area.

Dump Area B: From April 24 to 27, 2012, ERRS graded the Dump Area B and used clean excess soil from this area to backfill in Dump Area D and E.

Dump Area D: From May 22 to 25, 2012, ERRS backfilled with clean excess soil from Dump Area B and re-graded the area for adequate drainage.

Dump Area E: May 17 and 18, 2012, ERRS backfilled and re-graded Dump Area E utilizing soil from Dump Area B.

3.4.3 Site Restoration:

From June to July 2012, ERRS contractors completed restoration activities in Dump Areas A, B, D and E.

Dump Area A: A stone barrier was built on the north-west boundary of the Lower Trench of Dump Area A. This area was graded to 35% slope and all large rocks, boulders and organic debris were removed from this area and used as backfill in Dump Area D in order to support site accessible for remediation activities. Hydroseeding was completed in this area for erosion prevention.

Dump Area B: Clean soil from the access road near the northern portion of Dump Area B that divides Dump Area B from Dump Area E was utilized in the re-grading of Dump Area E. Dump Area B was graded to Dump Area C level. Hydroseeding was completed in this area for erosion prevention.

Dump Area D: The end grade of Dump Area D was approximately a 30% to 40% slope. In Dump Area D, a drainage control basin was installed at the south east section near the road in order to also improve site drainage. Hydroseeding was completed in this area for erosion prevention.

Dump Area E: Due to very wet soil conditions from rain events following excavation activities, clean soil was used to stabilize soils for grading. Hydroseeding was completed in this area for erosion prevention.

Access Road: The widened truck access road that stretched from the support zone to Dump Area D and the extension between Dump Area E and Dump Areas B and C was removed and returned to the previous conditions of the trail. The access road built adjacent to the high tension power line right-of-way through Dump Area D remained for subsequent remediation activities and at the request of the power company. Hydroseeding was completed in this area for erosion prevention.

Support Zones: The Site trailers, storage units, dumpster and all rented equipment were demobilized from the Site.

Attachment A

Removal Activities and Air Monitoring Report

1.0 Introduction

During the United States Environmental Protection Agency's (EPA's) Removal Action at the Mansfield Trail Dump Site (the Site), the Emergency and Rapid Response Services (ERRS) contractor, United States Coast Guard (USCG) Strike Team and the Removal Support Team 2 (RST 2) contractor conducted the following removal activities summarized in this report from February 21 to May 30, 2012.

Refer to Attachment A-1 - Figure 1, for Site Location Map and Figure 2, for Site Overview Map and Attachment A-2, for site activity photographic log organized by dump area.

2.0 Removal Activities

2.1 Oversight and Air Monitoring Activities

As part of the Removal Action, RST 2 completed the following tasks: documented on-site activities; conducted oversight of air monitoring activities by USCG; conducted oversight of waste characterization soil sampling; pre-delineation and post confirmation soil sampling; air sample collection; and provided sample and data management.

USCG assisted RST 2 with on-site perimeter and work zone air monitoring activities for the purpose of monitoring volatile organic compounds (VOC) concentrations. Daily weather information obtained from the weather pack station deployed by the USCG onsite was used to determine optimum monitoring locations. The USCG remotely monitored AreaRAE® units from the site trailer and assisted with routine site walks for health and safety during site operations. The AreaRAE® units were used to monitor the following parameters: VOCs, hydrogen sulfide (H₂S), carbon monoxide (CO) in parts per million (ppm) and the lower explosive limits (LEL) and oxygen (O₂) in percent (%). See Section 3.0 for air monitoring results. Air monitoring was conducted daily unless otherwise stated in Section 2.2, Weekly Chronology of Removal Activities.

2.2 Weekly Chronology of Removal Activities

Week 1

Tuesday, February 21, 2012: ERRS cleared brush from Dump Area A. In addition, ERRS laid and rolled eight loads of stone to widen the trail that passes through Dump Area D and connects the main truck access road to Dump Area A at the top of the ridge (Area D access road).

Wednesday, February 22, 2012: ERRS continued to clear brush from Dump Area A and began brush clearing in Dump Area B. ERRS collected four 5-point composite soil samples from Dump Area B and one 5-point composite soil sample from Dump Area C. All samples were collected in Level C personal protective equipment.

Thursday, February 23, 2012: ERRS continued to clear brush from Dump Area A. An ERRS operator used a dozer and roller to grade and compact roadway with four loads of Class A, two inch stone along Area D access road. ERRS collected a total of nine five-point composite samples

in Dump Area E. RST 2 conducted oversight during ERRS sampling activities and documented site activities

Friday, February 24, 2012: ERRS cut and piled trees in Dump Area B and piled debris in Dump Area D. ERRS collected a total of seven, five-point composite samples in Dump Area A. Four of the samples were taken in the lower section and three samples were taken in the upper section.

Week 2

Monday, February 27 to Tuesday, February 28, 2012: ERRS continued to clear brush from Dump Area A. In addition, ERRS laid and rolled eight loads of stone for road widening in Dump Area D from access road to Dump Area A.

Wednesday, February 29, 2012: ERRS crew continued to clear brush from Dump Area A and completed brush clearing in Dump Area B.

Thursday, March 1, 2012: ERRS crew continued to clear brush from Dump Area A. An ERRS operator used a dozer and roller to grade and compact the Dump Area D access road with four dump truck loads of Class A two-inch clean stone.

Friday, March 2, 2012: ERRS collected a total of 20 five-point composite samples in Dump Area D. RST 2 conducted oversight during ERRS sampling activities and documented site activities.

Week 3

Tuesday, March 6, 2012: ERRS completed clearing and chipping in Dump Area A and flagged designated hazardous and non-hazardous areas in Dump Areas A, B, & E. RST 2 conducted oversight and documented site activities.

Wednesday, March 7, 2012: ERRS continued to clear trees in Dump Area E and segregated hazardous and non-hazardous from Dump Area B and staged in Dump Area E.

Thursday, March 8, 2012: ERRS removed hazardous material from the Lower Trench of Dump Area A to designated staging Dump Area E. RST 2 conducted oversight and documented site activities and assisted USCG with daily air monitoring deployment.

Friday, March 9, 2012: ERRS removed hazardous material from the Upper Trench of Dump Area A to designated staging Dump Area E. RST 2 conducted oversight, documented site activities, and assisted USCG with daily air monitoring deployment.

Week 4

Monday, March 12, 2012: In the morning ERRS performed dry decon on two excavators and the off road dump truck in order to begin excavation of non-hazardous material following the completion of excavation of hazardous material. ERRS excavated non-hazardous material from Dump Area A and staged material in Dump Area E. RST 2 conducted oversight and documented site activities. RST 2 personnel conducted soil sampling in Dump Area C. A total of 20 soil samples were collected and hand-delivered to EPA Division of Environmental Science and Assessment (DESA) laboratory for VOC analysis. Refer to Attachment B, Section 1 for the Pre-Delineation Trip Report.

Tuesday, March 13, 2012: In the morning, ERRS removed 20 yards of non-hazardous material from the Lower Trench of Dump Area A and began removal of material in the Upper Trench of

Dump Area A. In the afternoon, ERRS removed 110 yards of non-hazardous material from the Upper Trench of Dump Area A. Crew prepared for sump pump installation, cleanup work area and secured silt fence around staging area in Dump Area E. RST 2 conducted oversight and documented site activities. RST 2 personnel conducted soil sampling in Dump Area C. A total of 20 soil samples were collected and hand-delivered to EPA DESA laboratory for VOC analysis. RST 2 collected three air samples from Dump Area A in the morning, two air samples from Dump Area A in the afternoon, and a field blank. Refer to Attachment C for Perimeter/Excavation Air Sampling Report.

Wednesday, March 14, 2012: ERRS completed excavation of the Upper and Lower Trench of Dump Area A in the morning. A load of Cement Kiln Dust was received and staged next to Dump Area B on the rear portion of the access path between Dump Areas B and E. In the afternoon, ERRS began installation of a sump in Dump Area B for the purposes of dewatering the material. Water treatment supplies were picked up by ERRS personnel. RST 2 conducted oversight and documented site activities. RST 2 personnel conducted soil sampling in Dump Area C. A total of 19 soil samples were collected and hand-delivered to EPA DESA laboratory for VOC analysis. RST 2 collected three air samples from Dump Area A in the morning, two air samples from Dump Area A in the afternoon, and a background sample near the site trailer.

Thursday, March 15, 2012: In the morning, ERRS completed the sump installation in Dump Area B, dug test pits in Dump Area D and installed two sumps in Dump Area D, Trench 4. ERRS received 25 tons of 2 ½ inch clean stone. In the afternoon, ERRS excavated in Dump Area D to install one sump. A delivery of 18 inch culvert pipe was received on site. ERRS personnel drilled holes in pipe for installation of sump. RST 2 conducted oversight and documented site activities. RST 2 personnel conducted soil sampling in Dump Area A. A total of 20 soil samples were collected and hand-delivered to EPA DESA laboratory for VOC analysis.

Friday, March 16, 2012: ERRS installed the two sumps into Dump Area D and operated sumps to extract water from trenches. ERRS covered Cement Kiln Dust for expected rain event. In the afternoon, ERRS crew began excavation of Trench 4, the upper trench in Dump Area D and removed four loads from this area and staged it in Dump Area E. RST 2 personnel conducted soil sampling in Dump Area A. A total of 21 soil samples were collected and hand-delivered to EPA DESA laboratory for VOC analysis.

Week 5

Monday, March 19, 2012: In the morning, ERRS completed excavation in the upper Trench 4 of Dump Area D, where six loads of material were removed to the staging area. In the afternoon, ERRS operator prepared middle trench for excavation, removed debris and graded area for access.

Tuesday, March 20, 2012: ERRS excavated non-hazardous material from the middle of Trenches 2 and 3 in Dump Area D, and 13 truckloads were transported to staging area.

Wednesday, March 21, 2012: ERRS excavated non-hazardous material from the middle of Trenches 2 and 3 in Dump Area D, and 15 truckloads were transported to staging area.

Thursday, March 22, 2012: ERRS excavated non-hazardous material from the trench in Dump Area B, where six truck loads were transported to staging area. Kiln dust was mixed with the material to bind the liquids. A total of nine trucks transported non-hazardous material off site from 0630 hrs to 0900 hrs.

Friday, March 23, 2012: Non-hazardous material load out occurred from 0600 hrs to 1000 hrs where 15 dump trucks transported material off site to the designated landfill. ERRS continued the excavation of non-hazardous material from Dump Area B. Kiln dust was mixed with the material to bind the liquids. In the afternoon, ERRS excavated and transported five loads from Dump Area B and eight loads from Dump Area D to the stock pile in Dump Area E.

Week 6

Monday, March 26, 2012: A total of 15 trucks transported non-hazardous material off site from 0630 hrs to 0900 hrs. A total of six loads were excavated from Dump Area B in the morning and 18 loads were excavated from the middle trenches of Dump Area D in the afternoon.

Tuesday, March 27, 2012: A total of 14 trucks transported non-hazardous material off site from 0630 hrs to 0900 hrs. ERRS removed 18 loads of non-hazardous material from the middle trench of Dump Area D.

Wednesday, March 28, 2012: A total of 24 trucks transported non-hazardous material off site from 0630 hrs to 1015 hrs. ERRS removed 16 loads of non-hazardous material from the middle trench of Dump Area D. The stock pile was restacked for load out. All site work ceased from 1200 hrs to 1330 hrs due to a thunderstorm event.

Thursday, March 29, 2012: A total of 15 trucks transported non-hazardous material off site from 0630 hrs to 0900 hrs. ERRS removed 16 loads of non-hazardous material from the middle trench of Dump Area D. The stock pile was restacked for load out. Two truckloads of Class A 2-inch stone were delivered to be utilized for road repair and backfill.

Friday, March 30, 2012: A total of 25 trucks transported non-hazardous material off site from 0630 hrs to 1000 hrs. ERRS removed 25 loads of non-hazardous material from the middle trench of Dump Area D. Two truckloads of Class A 2 ½ inch stone were delivered to be utilized for road repair and backfill.

Week 7

Monday, April 2, 2012: A total of 24 trucks transported non-hazardous material off site from 0630 hrs to 1000 hrs. ERRS removed 20 loads of non-hazardous material from the middle and lower trenches of Dump Area D.

Tuesday, April 3, 2012: A total of 20 trucks transported non-hazardous material off site from 0630 hrs to 1000 hrs. ERRS removed 25 loads of non-hazardous material from the middle and lower trenches of Dump Area D and stockpiled in staging area.

Wednesday, April 4, 2012: A total of 25 trucks transported non-hazardous material off site from 0630 hrs to 1000 hrs. ERRS removed 25 loads of non-hazardous material from the middle and lower trenches of Dump Area D. The stock pile was restacked for next days load out. ERRS secured the excavated area with high visibility fence, and filled in the deepest area of the excavation with 2-inch stone.

Week 8

Monday, April 9, 2012: A total of 15 trucks transported non-hazardous material off site from 0730 hrs to 0830 hrs. ERRS removed 18 loads of non-hazardous material from the middle and lower trenches of Dump Area D.

Tuesday, April 10, 2012: A total of 11 trucks of sulfide containing material and one truck of non-hazardous material were transported off site from 0630 hrs to 0830 hrs. ERRS removed 13 loads of non-hazardous and sulfide material from the middle and lower trenches of Dump Area D. Kiln dust was utilized to bind the water-containing material.

Wednesday, April 11, 2012: ERRS removed 19 loads of non-hazardous material from the lower trench of Dump Area D to stock pile in Dump Area E. Kiln dust was utilized to bind the water-containing material in the excavation area prior to transport to stock pile in Dump Area E.

Thursday, April 12, 2012: ERRS removed 20 loads of non-hazardous material from the lower trench of Dump Area D. A green material was discovered in Trench 2 of Dump Area D. This material was sampled by RST 2 due to the color difference (i.e., green color) of this material to the non-hazardous material sampled for waste characterization analysis prior to excavation and removal activities. RST 2 collected two samples of this material and was sent to the ERRS procured lab for waste characterization analyses. Refer to Attachment D, Section 2 for the sampling trip report for the green material.

Friday, April 13, 2012: A total of four truck loads of non-hazardous material were transported off site from 0630 hrs to 0700 hrs. ERRS removed 10 loads of non-hazardous material from the lower trench of Dump Area D to stock pile in Dump Area E. ERRS operator created a temporary stock pile located on the south end of the middle trench in Dump Area D in order to continue excavation.

Week 9

Monday, April 16, 2012: ERRS excavated non-hazardous material from lower trench in Dump Area D and stockpiled 13 loads into temporary stock pile located in Dump Area D, due to a full stock pile in Dump Area E. ERRS operator graded the area where the temporary stock pile was located and built out a dirt path for dump truck access.

Tuesday, April 17, 2012: ERRS excavated non-hazardous material from lower trench in Dump Area D and stockpiled eight loads into temporary stock pile located in Dump Area D.

Wednesday, April 18, 2012: ERRS excavated non-hazardous material from lower trench in Dump Area D and stockpiled 11 dump truck loads into temporary stock pile located in Dump Area D.

Thursday, April 19, 2012: ERRS excavated sample locations RST 2 personnel marked which exceeded the action level of 1 ppm for TCE in the upper trench of Dump Area A. While ERRS completed this task, additional black non-hazardous waste material was discovered. ERRS excavated material from Dump Area A and removed 12 loads to the temporary stock pile in Dump Area D.

Friday, April 20, 2012: ERRS backfilled the excavated area in Upper Trench of Dump Area A with the boulder stock pile in Dump Area D and excess soil from Dump Area A after slope re-grading.

Week 10

Tuesday, April 24, 2012: ERRS excavated non-hazardous material from lower trench in Dump Area D and stockpiled 18 loads into temporary stock pile located in Dump Area D. ERRS prepared the Site for one week demobilization.

Wednesday, April 25, 2012: One load of 2 ½ inch Class A stone was delivered at 0900 hrs to build a road to the hazardous material stock pile area in Dump Area E. As directed by the OSC with oversight provided by RST 2, ERRS removed sample areas in Dump Area B which were above the action levels.

Week 11

Thursday, May 3, 2012: EPA OSC, RST 2, ERRS mobilized to the Site to continue Removal Action activities.

Friday, May 4, 2012: ERRS conducted site housekeeping, restack stock pile in Dump Area E and prepared for heavy volume of off loading activities for the following week.

Week 12

Monday, May 7, 2012: A total of 30 trucks of non-hazardous material were transported off site for disposal. ERRS removed 12 loads of non-hazardous material from Dump Area D stockpile to Dump Area E staging area.

Tuesday, May 8, 2012: A total of 38 trucks of non-hazardous material were transported off site for disposal. ERRS removed 35 loads of non-hazardous material from Dump Area D stockpile to Dump Area E staging area.

Wednesday, May 9, 2012: A total of 37 trucks of non-hazardous material were transported off site for disposal. ERRS removed 19 loads of non-hazardous material from Dump Area D stockpile to Dump Area E staging area.

Thursday, May 10, 2012: A total of 37 trucks of non-hazardous material were transported off site for disposal. ERRS removed 21 loads of non-hazardous material from Dump Area D stockpile to Dump Area E staging area.

Friday, May 11, 2012: ERRS excavated and removed 22 loads of non-hazardous material from Dump Area D to Dump Area E staging area.

Week 13

Monday, May 14, 2012: ERRS loaded out a total of 33 trucks of non-hazardous material were transported off site for disposal. ERRS removed 18 loads of non-hazardous material from Dump Area D stock pile to Dump Area E staging area. ERRS begins to backfill and re-grade Dump Area D with dozer with on-site soil collected from along the edges of the forest and re-sloping the area to minimize erosion and improve adequate drainage.

Tuesday, May 15, 2012: ERRS collected debris and trash from Dump Area A and swept the roadway for load out tomorrow. Rain limited site activity.

Wednesday, May 16, 2012: In the morning, a total of 11 trucks of non-hazardous material were transported off site for disposal. ERRS completed excavation of Dump Area D a total of 10 loads of non-hazardous material from Dump Area D stock pile to Dump Area E staging area. ERRS continues to re-grade Dump Area D and re-sloping the area to minimize erosion and improve adequate drainage.

Thursday, May 17, 2012: A total of 39 trucks of non-hazardous material were transported off-site for disposal. ERRS completed grading and backfilling of Dump Area D.

Friday, May 18, 2012: A total of 23 trucks of non-hazardous material were transported off site for disposal.

Week 14

Monday, May 21, 2012: One truck of non-hazardous material was transported off site for disposal. ERRS began removal of road leading to staging area and cleaned gravel road. RST 2 demobilizing equipment from the Site. Air monitoring not conducted.

Tuesday, May 22, 2012: ERRS decontaminated equipment, continued to clean roadway, and prepare supplies and equipment for demobilization. Air monitoring not conducted.

Wednesday, May 23, 2012: A total of six loads of top soil were delivered to the Site. Air monitoring not conducted.

Thursday, May 24, 2012: ERRS decontaminated excavator and off road dump truck. Air monitoring not conducted.

Friday, May 25, 2012: ERRS and RST 2 demobilized from the Site. Air monitoring not conducted.

3.0 Air Monitoring Section

Air monitoring activities were conducted in accordance with the procedures outlined within the USEPA guidance document entitled, "Superfund Program Representative Sampling Guidance, Volume 2: Air (Short-Term Monitoring), Interim Final, 1995, EPA 540/R-95/140. (OSWER Directive 9360.4-09, PB 96-963206)."

3.1 Air Monitoring Activities

Prior to removal activities, the USCG deployed a weather pack and performed a fresh air bump test for the AreaRAE® units. The USCG deployed AreaRAE® units in designated air monitoring stations. The parameters monitored were volatile VOCs, H₂S, CO in ppm and the LEL and O₂ in %. Any sustained high readings were noted in the daily summary. The USCG assisted RST 2 in performing health and safety monitoring of ERRS crew members in the field and monitored the AreaRAE® units remotely from the site trailer.

3.2 Air Monitoring Locations

Air stations were established along the periphery of the dump areas. RST 2 and USGC planned the day's air monitoring locations and reported the strategy to the OSC for approval. The USCG then deployed the AreaRAE® units in the selected air stations. The air stations located in Table 3.1 were used to mark the locations of the air monitoring units. (Refer to Figure 3. in Attachment A-1 for a map of the air monitoring locations)

Table 3-1: Air Station Locations

Air Station	Area Location	GPS Location		Air Station	Area Location	GPS Location	
		Lat	Long			Lat	Long
AA-001	Area A	40.928811398	-74.69939583	AA-011	Area D	40.928829154	-74.69849562
AA-002	Area A	40.928933946	-74.699735022	AA-012	Area E	40.9279432	-74.69870183
AA-003	Area A	40.928688507	-74.699791542	AA-013	Area B	40.92773744	-74.69910042
AA-004	Area D	40.92877892	-74.698195177	AA-014	Area B	40.927540333	-74.69900797
AA-005	Area D	40.92926838	-74.697875458	AA-015	Area C	40.92773320	-74.69870186
AA-006	Area D	40.929492812	-74.698092717	AA-016	Area D	40.929093864	-74.69802289
AA-007	Area D	40.92879148	-74.698617266	AA-017	Area D	40.928717804	-74.69836521
AA-008	Area D	40.92923201	-74.697636255	AA-018	Area D	40.929357089	-74.69768848
AA-009	Area E	40.927961174	-74.698284849	AA-019	Area D	40.929152213	-74.69808214
AA-010	Area D	40.92900101	-74.697704075	AA-020	Area E	40.929522613	-74.69834424

3.3 Air Monitoring Action Levels

The AreaRAE® action levels and appropriate response procedures for perimeter air monitoring are specified in Table 3-2: Community Air Monitoring Action Levels for VOCs (Direct-Reading Instrumentation). The action level values were based on using one-half the value of the Occupational Safety and Health Administration (OSHA) permissible exposure limit (PEL) for TCE, which is 100 ppm (537 mg/m³). Table 3-2 located on the following page.

Table 3-2: Community Air Monitoring Action Levels for VOCs (Direct-Reading Instrumentation)

Parameter	Zone Location and Monitoring Interval	Action Levels (Above Background)	Response Activity
VOCs (Total by Area RAE and PID)	Perimeter zone continual and periodic air monitoring during demolition, segregation, sampling and load-out activities.	< 25 ppm	Continue monitoring, continue normal work activities
		25-50 ppm	Cease work activities; take measures to suppress VOC emissions and contact the Site H&S Officer
		>50 ppm	Cease work activities; contact the Site H&S Officer

Air monitoring did not occur the last week on site since Removal Action activities were completed.

3.4 Air Monitoring Discussion

The overall air monitoring readings during Removal Action activities were within acceptable limits according to the Action Levels. The VOCs were consistently below 1 ppm for the daily average. The following days had short in duration spikes of VOCs above 25 ppm which were attributed to close proximity of excavator equipment or material sniff readings. On March 1, 2012, Unit 6, Area C, Station 15 was used for a sniff test of material by USCG. On March 21, 2012, Unit 2, Area D, Station 17, was attributed to close proximity of excavator during soil excavation in Trenches 2 and 3 and sniff testing of material. On March 22, 2012, Unit 3, Area E, Station 9 and on April 4, 2012, Unit 2, Area E, Station 9 was attributed to close proximity of excavator during stockpiling activities. None of the above readings exceeded 5 minutes at levels above 25 ppm.

3.5 Air Monitoring Summary Tables

The weekly air monitoring table includes the AreaRAE® units daily average and peak readings for VOC, H₂S, and CO parameters in ppm.

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Table 3-3: Week 1 Air Monitoring Summary Table

Date	Area	Station	Area RAE Unit	Monitoring Period	VOC (ppm)		H ₂ S (ppm)		CO (ppm)		Weather Condition
					Avg.	Peak	Avg.	Peak	Avg.	Peak	
2-22	B	NA	1	0740 - 1537	0	0	0.0006	0.1	0.024	0.2	Wind Speed: 1.1 Direction: NE Temperature: 51.3 F Humidity: 37%
	C	NA	3	0740 - 1537	0.00063	0.1	0	0	0.0033 6	0.1	
	E	NA	4	0758 - 1031	0	0	0	0	0	0	
2-23	E	NA	1	0757 - 1531	0	0	0.0081	1.7	0.0036	0.2	Wind Speed: 1.8 Direction: E Temperature: 54.5 F Humidity: 34%
	E	NA	2	0732 - 1531	0	0	0	0	0	0	
	E	NA	5	1224 - 1531	0.510	19.2	0.025	0.7	0.0022	0.3	
	E	NA	6	0948 - 1323	0.02	0.3	0	0	0	0	
2-24	A	1	1	0840 - 1418	0	0	0	0	0	0	Wind Speed: 4.5 Direction: W Temperature: 34.7 F Humidity: 98%
	A	3	2	0840 - 1417	0	0	0	0	0	0	
	A	2	5	0933 - 1417	0.1891	4.9	0.0065	1.8	0.2855	1.6	

Notes: NA – not applicable. Air stations were not established at this time; VOC – volatile organic compound; H₂S – hydrogen sulfide; ppm – part per million; wind direction (N-North, S-South, W-West, E-East); F – degrees Fahrenheit; Avg. – Average concentration based on duration of time unit was in operation.

Table 3-4: Week 2 Air Monitoring Summary Table

Date	Area	Station	Area RAE Unit	Monitoring Period	VOC (ppm)		CO (ppm)		H ₂ S (ppm)		Weather Condition
					Avg.	Peak	Avg.	Peak	Avg.	Peak	
2-29	C	15	1	0747 - 1343	0	0	0.0667	2	0	0	Wind Speed: 2.9 Direction: W Temperature: 32.5 F Humidity: 96%
	E	9	2	0747 - 1344	0	0	0	0	0	0	
3-1	E	12	3	0734 - 1606	4.9566	24.6	1.1281	2.7	0.0016	0.1	Wind Speed: 1.0 Direction: W Temperature: 35.5 F Humidity: 85%
	C	15	6	0734 - 1606	0.677	48.3	0.0063	3.2	0	0	
3-2	D	11	1	0744 - 1546	0.0006	0.3	0.0857	0.9	0	0	Wind Speed 0.8 Direction: W Temperature: 33.0 F Humidity: 80%
	D	10	6	0744 - 1515	0	0	0	0	0	0	

Notes: NA – not applicable. Air stations were not established at this time; VOC – volatile organic compound; H₂S – hydrogen sulfide; ppm – part per million; wind direction (N-North, S-South, W-West, E-East); F – degrees Fahrenheit; Avg. – Average concentration based on duration of time unit was in operation.

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Table 3-5: Week 3 Air Monitoring Summary Table

Date	Area	Station	Area RAE Unit	Monitoring Period	VOC (ppm)		H2S (ppm)		CO (ppm)		Weather Condition
					Avg.	Peak	Avg.	Peak	Avg.	Peak	
3-6	A	1	1	0950 – 1715	0	0	0	0	0.0973	1.2	Wind Speed 0.9 Direction: E Temperature: 40.1 F Humidity: 27%
	A	3	4	0950 – 1643	0.4242	1.0	0.0087	0.1	0.0731	2.2	
3-7	C	15	1	0745 – 1705	0	0	0	0	0.0013	0.1	Wind Speed 1.1 Direction: NE Temperature: 51.3 F Humidity: 37%
	E	12	2	0810 – 1030	0.0748	8.5	0	0	0	0	
	E	9	4	0745 – 1649	0.0164	8.9	0	0	0.0002	0.1	
3-8	A	1	1	1130 – 1445	0.02	0.3	0	0	0	0	Wind Speed 1.1 Direction: NE Temperature: 51.3 F Humidity: 37%
	A	3	6	0930 – 1700	0	0	0	0	0	0	
	E	9	2	0930 – 1700	0	0	0	0	0	0	
	E	12	3	0920 – 1700	0.1891	4.9	0.2855	1.6	0.0065	1.8	
	MU	MU	4	0804 – 1615	0.0038	1.1	0	0	0	0	

Notes: Mobile unit; VOC – volatile organic compound; H₂S – hydrogen sulfide; ppm – part per million; wind direction (N-North, S-South, W-West, E-East); F – degrees Fahrenheit; Avg. – Average concentration based on duration of time unit was in operation.

Table 3-6: Week 4 Air Monitoring Summary Table

Date	Area	Station	Area RAE Unit	Monitoring Period	VOC (ppm)		CO (ppm)		H2S (ppm)		Weather Condition
					Avg.	Peak	Avg.	Peak	Avg.	Peak	
3-12	E	9	1	1147 – 1652	0	0	0.0003	0.1	0	0	Wind Speed 1.6 Direction: E Temperature: 66.7 F Humidity: 23%
	A	1	2	1147 – 1554	0	0	0.249	0.5	0.027	0.5	
	A	2	3	1147 – 1554	0.0036	0.3	0.195	1.8	0	0	
3-13	A	3	1	0757 – 1535	0	0	0.001	0.2	0	0	Wind Speed 0.7 Direction: N Temperature: 70.9 F Humidity: 48%
	A	1	2	0757 – 1534	0	0	0.322	2.9	0.303	2.9	
	A	2	3	0757 – 1534	1.012	3.7	0.39	2.0	0	0	
	E	9	4	0801 – 1534	0	0	0	0	0	0	
	MU	MU	6	0757 – 1534	0.167	1.7	0.137	1.3	0.029	0.1	
3-14	A	2	1	0808 – 1540	0.038	0.4	1.353	3.2	0.128	0.3	Wind Speed 1.6 Direction: SE Temperature: 65.5 F Humidity: 18%
	A	1	2	0808 – 1429	0.002	0.2	0.578	2.7	0.066	0.3	
	D	4	3	0808 – 1501	0.005	0.4	0.143	3.6	0.020	0.2	
	D	5	4	0808 – 1540	0.005	0.9	0.212	9	0.002	0.1	
	E	9	6	0811 – 1540	0.0002	0.1	0.465	6.2	0.100	0.2	
3-15	D	6	1	0733 – 1438	0.202	0.7	0.334	2.4	0.027	0.3	Wind Speed 2.9 Direction: E Temperature: 46.0 F Humidity: 60%
	D	7	2	0734 – 1510	0	0	0.696	3.9	0.053	0.3	
	D	8	4	0733 – 1512	0	0	0.014	0.5	0	0	
	E	9	6	0733 – 1510	0	0	0.096	1.5	0.008	0.1	
3-16	D	6	1	0740 – 1507	0.093	0.7	0.199	1.2	0	0	Wind Speed 0.2 Direction: ENE Temperature: 44.8 F Humidity: 93%
	D	7	3	0744 – 1507	2.149	6.4	0	0	0.0002	0.1	
	D	8	4	0739 – 1508	0	0	0.011	0.5	0	0	
	E	9	6	0740 – 1425	1.559	6.6	0.041	1.3	0.0007	0.1	

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Notes: Mobile unit; VOC – volatile organic compound; H₂S – hydrogen sulfide; ppm – part per million; wind direction (N-North, S-South, W-West, E-East); F – degrees Fahrenheit; Avg. – Average concentration based on duration of time unit was in operation.

Table 3-7: Week 5 Air Monitoring Summary Table

Date	Area	Station	Area RAE Unit	Monitoring Period	VOC (ppm)		CO (ppm)		H ₂ S (ppm)		Weather Condition
					Avg.	Peak	Avg.	Peak	Avg.	Peak	
3-19	D	18	2	1317 – 1517	0	0	0	0	0	0	Wind Speed 2.4 Direction: NE Temperature: 73 F Humidity: 40%
	D	10	3	1317 – 1517	0	0	0	0	0	0	
	E	9	6	1317 – 1517	0.023	0.9	0	0	0	0	
3-20	E	9	2	0759 – 0825	0.115	1.1	1.423	16.6	0.104	1.0	Wind Speed 1.3 Direction: N Temperature: 71 F Humidity: 38%
	D	5	3	0759 – 0812	6.085	7.8	0.192	0.6	0.008	0.1	
	D	8	4	0759 – 0812	0	0	0	0	0	0	
	E	20	6	0759 – 0817	0.408	1.9	0	0	0.067	0.3	
3-21	D	7	1	0703 – 1518	0	0	0	0	0	0	Wind Speed 1.0 Direction: SE Temperature: 65 F Humidity: 42%
	D	17	2	0703 – 1518	6.582	34.1	0.504	3.9	0.087	0.3	
	E	20	3	0703 – 1519	2.403	11.4	0.187	50.1	0.002	0.2	
	E	12	4	0703 – 1518	0.039	0.5	0	0	0	0	
3-22	E	12	2	0602 – 1414	0	0	0.284	1.7	0.168	0.6	Wind Speed 2.9 Direction: N Temperature: 58 F Humidity: 45%
	E	9	3	0626 – 1413	3.068	31.7	0.101	1.4	0	0	
	D	10	4	0703 – 1413	0.027	0.5	0	0	0	0	
2-23	E	9	1	0556 – 1423	0.060	1.2	0.084	1.1	3.239	14.2	Wind Speed 0.5 Direction: E Temperature: 63 F Humidity: 32%
	D	18	2	0556 – 1424	0.845	7.1	2.064	5.9	0.250	0.7	
	D	5	3	0556 – 1424	0.096	2.8*	0.004	0.5	0.001	0.1	
	D	10	4	0556 – 1424	0.0038	0.4	0.132	1.2	0.041	0.2	

Notes: Mobile unit; VOC – volatile organic compound; H₂S – hydrogen sulfide; ppm – part per million; wind direction (N-North, S-South, W-West, E-East); F – degrees Fahrenheit; Avg. – Average concentration based on duration of time unit was in operation.

* On February 23, 2012, at 09:18 area RAE unit 3 read at 299.3 ppm and was attributed as an error. Another area RAE was brought into the area with no readings. The unit was reset with a fresh air bump calibration.

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Table 3-8: Week 6 Air Monitoring Summary Table

Date	Area	Station	Area RAE Unit	Monitoring Period	VOC (ppm)		CO (ppm)		H2S (ppm)		Weather Condition
					Avg.	Peak	Avg.	Peak	Avg.	Peak	
3-26	E	9	1	1051 - 1413	0	0	1.423	2.9	1.941	5.3	Wind Speed 1.5 Direction: N Temperature: 63.2F Humidity: 45%
	E	20	2	1051 - 1414	0	0	0.662	1.9	0.077	0.2	
	D	10	3	1051 - 1414	0.063	0.7	0	0	0.0004	0.1	
	D	18	4	1051 - 1413	0.001	0.2	0.092	0.8	0	0	
3-27	E	9	1	0612 - 1438	0	0	0.320	1.9	1.258	6.8	Wind Speed 3 Direction: NE Temperature: 74 F Humidity: 50%
	E	20	2	0612 - 1438	0.0130	0.5	0.375	2.1	0.001	0.4	
	D	11	3	0742 - 1354	0.053	0.7	0.291	1.4	0.0006	0.1	
	D	8	4	0851 - 1439	0.101	0.6	0.088	0.7	0	0	
3-28	D	21	1	0836 - 1515	0.024	0.6	0.074	1.0	4.064	8.2	Wind Speed 0.7 Direction: N Temperature: 72 F Humidity: 43%
	E	12	2	0625 - 1515	0.003	0.2	0.642	2.6	0.021	0.2	
	D	19	4	0624 - 1515	0.198	0.8	0.188	1.1	0	0	
	E	9	6	0836 - 1515	0.029	2.3	0.220	3.1	0	0	
3-29	D	17	1	0720 - 1435	0.002	0.2	0.670	1.9	0.137	6.8	Wind Speed 1.5 Direction: S Temperature: 77.5 F Humidity: 28%
	E	12	2	0608 - 1436	0.041	0.7	0.039	3.4	0.005	0.1	
	D	10	4	0608 - 1436	0.486	1.2	0.003	0.4	0	0	
	E	20	6	0720 - 1436	0.619	5.4	0.507	2.9	0.002	0.1	
3-30	D	17	1	0619 - 1557	0.159	5.1	0.069	1.5	0.011	0.1	Wind Speed 2.1 Direction: SE Temperature: 65 F Humidity: 37%
	E	20	2	0619 - 1556	0.009	0.9	0.003	0.2	0.010	0.2	
	E	12	4	0915 - 1557	0.053	0.6	0.001	0.2	0	0	
	D	7	6	0915 - 1557	0.208	2.9	0.399	2.9	0.0198	0.2	

Notes: Mobile unit; VOC - volatile organic compound; H₂S - hydrogen sulfide; ppm - part per million; wind direction (N-North, S-South, W-West, E-East); F - degrees Fahrenheit; Avg. - Average concentration based on duration of time unit was in operation.

Table 3-9: Week 7 Air Monitoring Summary Table

Date	Area	Station	Area RAE Unit	Monitoring Period	VOC (ppm)		CO (ppm)		H2S (ppm)		Weather Condition
					Avg.	Peak	Avg.	Peak	Avg.	Peak	
4-2	E	20	1	0958 - 1606	0.086	1.4	0.003	0.7	0	0	Wind Speed 2.5 Direction: SE Temperature: 54.7 F Humidity: 25%
	E	9	2	0958 - 1606	0.257	3.3	0.256	1.9	0.0002	0.1	
	D	10	4	0958 - 1606	0.813	17.7	0.032	0.8	0	0	
	D	16	6	0958 - 1606	0.823	5.0	0.620	5.4	0.033	0.3	
4-3	E	12	1	0609 - 1614	0.019	1.6	0.684	1.9	0.019	0.2	Wind Speed 1.6 Direction: SE Temperature: 51.1 F Humidity: 19%
	E	9	2	0609 - 1614	0.272	13.3	0.427	2.6	0	0	
	D	8	4	0722 - 1614	0.242	4.8	0.151	1.3	0.010	0.1	
	D	11	6	0722 - 1614	1.320	6.0	0.687	3.3	0.007	0.1	
4-4	E	12	1	0616 - 1342	0.030	1.2	0.733	1.9	0.010	0.2	Wind Speed 2.1 Direction: SE Temperature: 57.4 F Humidity: 28%
	E	9	2	0616 - 1342	1.346	29.4	0.259	2.6	0.005	0.1	
	C	11	4	0854 - 1329	0.010	0.5	0.009	0.4	0.002	0.1	
	E	8	6	0854 - 1328	1.51	5.8	3.365	6.0	0.037	0.2	

Mansfield Trail Dump Site
Removal Activity and Air Monitoring Report
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Notes: Mobile unit; VOC – volatile organic compound; H₂S – hydrogen sulfide; ppm – part per million; wind direction (N-North, S-South, W-West, E-East); F – degrees Fahrenheit; Avg. – Average concentration based on duration of time unit was in operation.

Table 3-10: Week 8 Air Monitoring Summary Table

Date	Area	Station	Area RAE Unit	Monitoring Period	VOC (ppm)		CO (ppm)		H ₂ S (ppm)		Weather Condition
					Avg.	Peak	Avg.	Peak	Avg.	Peak	
4-9	E	9	1	0929 – 1529	0.041	1.1	0.263	1.9	0	0	Wind Speed 2.0 Direction: E Temperature: 58.0 F Humidity: 17%
	E	12	2	0929 – 1529	0.049	0.6	0.628	2.2	0.199	0.4	
	D	11	4	0929 – 1528	0.040	0.6	0.031	0.4	0	0	
	D	8	6	0929 – 1529	0.272	4.6	0.282	2.0	0.003	0.1	
4-10	D	MU	1	0720 – 1408	0.002	0.3	0.191	1.0	0	0	Wind Speed 0.4 Direction: E Temperature: 43.3 F Humidity: 54%
	D	19	2	0734 – 1409	0.007	0.7	1.004	4.4	0.123	0.5	
	E	15	4	0739 – 1408	0.002	0.7	0.0007	0.1	0	0	
	E	20	6	0729 – 1408	0.003	0.5	0.008	0.6	0	0	
4-11	D	11	2	1518 – 1519	0	0	0	0	0.05	0.1	Wind Speed 1.6 Direction: E Temperature: 50.0 F Humidity: 34%
	E	12	4	1514 – 1519	0	0	0	0	0	0	
	E	20	6	1509 – 1519	0.118	0.7	0.009	0.1	0	0	
4-12	D	17	2	1443 – 1453	0.0455	0.5	0	0	0	0	Wind Speed 1.9 Direction: SE Temperature: 55.8 F Humidity: 40%
	E	12	4	1443 – 1453	2.364	14.1	0.072	0.4	0	0	
	D	11	6	1443 – 1453	2.545	11	0.172	0.8	0	0	
4-13	D	MU	1	0715 – 1417	0.0007	0.1	0.001	0.1	0	0	Wind Speed 1.1 Direction: SE Temperature: 57.0 F Humidity: 28%
	D	11	2	0715 – 1416	0.033	0.4	0.909	3.0	0.175	0.5	
	E	12	4	0715 – 1417	0.254	0.9	0.285	3.0	0.031	0.1	
	E	20	6	0715 – 1417	0.055	0.3	0.411	1.5	0.055	0.3	

Notes: Mobile unit; VOC – volatile organic compound; H₂S – hydrogen sulfide; ppm – part per million; wind direction (N-North, S-South, W-West, E-East); F – degrees Fahrenheit; Avg. – Average concentration based on duration of time unit was in operation.

Mansfield Trail Dump Site
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Table 3-11: Week 9 Air Monitoring Summary Table

Date	Area	Station	Area RAE Unit	Monitoring Period	VOC (ppm)		CO (ppm)		H2S (ppm)		Weather Condition
					Avg.	Peak	Avg.	Peak	Avg.	Peak	
4-16	D	17	1	0949 – 1026	0.011	0.2	0.027	0.2	0	0	Wind Speed 1.1 Direction: N Temperature: 86.0 F Humidity: 24%
	D	18	2	0953 – 1451	0.116	7.3	0.468	1.8	0.138	0.4	
	E	12	4	0949 – 1451	0.009	0.4	0.764	1.7	0.056	0.2	
	E	20	6	0958 – 1451	0.562	3.3	1.669	3.7	0.021	0.7	
4-17	D	18	1	0707 – 1449	0.080	22.2	0.051	0.9	0.093	0.2	Wind Speed 1.3 Direction: SE Temperature: 69.8 F Humidity: 25%
	D	17	2	0707 – 0954	0.054	0.4	2.107	3.9	0.82	1.2	
	D	17	3	0944 – 1035	0.0004	0.4	0.156	1.4	0	0	
	D	10	4	0707 – 1449	0.003	1.6	0.192	1.7	0.062	0.2	
	E	9	6	0707 – 1458	0.255	3.6	0.060	0.9	0.002	0.1	
4-18	D	18	1	0717 – 1500	0.007	2.2	0.163	1.9	0.011	3.7	Wind Speed 0.9 Direction: SE Temperature: 53.2 F Humidity: 36%
	D	11	4	0715 – 1500	0.074	4.5	0.007	4.5	0	0.1	
	D	10	6	0724 – 1500	0.536	13.7	0.339	7.8	0.001	0.6	
4-19	D	10	1	0726 – 1502	0	0.5	0.158	1.3	0.060	0.3	Wind Speed 0.2 Direction: SE Temperature: 69.8 F Humidity: 24%
	A	3	4	0726 – 1331	0.033	4.6	0.053	1.3	0	0	
	E	20	6	0726 – 1504	0.021	5.3	0	0	1.080	1.2	
4-20	D	11	1	0705 – 1250	0.005	0.4	0.100	1.6	0.130	0.3	Wind Speed 0.5 Direction: N Temperature: 68.0 F Humidity: 46%
	A	3	4	0705 – 1402	0.031	1.4	0.091	5.1	0.001	0.2	
	E	20	6	0705 – 1402	0.188	4.4	0.400	1.5	0.069	0.3	

Notes: Mobile unit; VOC – volatile organic compound; H₂S – hydrogen sulfide; ppm – part per million; wind direction (N-North, S-South, W-West, E-East); F – degrees Fahrenheit; Avg. – Average concentration based on duration of time unit was in operation.

Table 3-12: Week 10 Air Monitoring Summary Table

Date	Area	Station	Area RAE Unit	Monitoring Period	VOC (ppm)		CO (ppm)		H2S (ppm)		Weather Condition
					Avg.	Peak	Avg.	Peak	Avg.	Peak	
4-24	D	10	1	1019 – 1646	0.0001	0.2	0.162	1.2	0.002	0.1	Wind Speed 1.3 Direction: NW Temperature: 64.2 F Humidity: 67%
	E	9	4	1019 – 1646	0.018	1.0	0.053	1.2	0	0	
	C	15	5	1019 – 1646	0.002	0.4	0.037	1.2	0.001	0.2	
4-25	E	9	1	0748 – 1159	0	0	0.0006	0.3	0	0	Wind Speed 1.3 Direction: NW Temperature: 64.2 F Humidity: 67%
	E	12	4	0748 – 1159	0.137	0.8	0	0	0	0	
	C	15	5	0748 – 1159	0	0	0	0	0.0008	0.1	

Notes: Mobile unit; VOC – volatile organic compound; H₂S – hydrogen sulfide; ppm – part per million; wind direction (N-North, S-South, W-West, E-East); F – degrees Fahrenheit; Avg. – Average concentration based on duration of time unit was in operation.

Mansfield Trail Dump Site
Removal Activity and Air Monitoring Report
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Table 3-13: Week 11 Air Monitoring Summary Table

Date	Area	Station	Area RAE Unit	Monitoring Period	VOC (ppm)		CO (ppm)		H2S (ppm)		Weather Condition
					Avg.	Peak	Avg.	Peak	Avg.	Peak	
5-3	E	20	1	0938 - 1518	0	0	0.005	1.5	0.092	0.3	Wind Speed 1.3 Direction: E Temperature: 72 F Humidity: 80%
	E	12	4	0938 - 1518	0.015	0.5	0.139	3.8	0.003	0.1	
	C	15	5	0938 - 1518	0	0	0.888	4.9	0	0	
5-4	E	20	1	0704 - 1418	0.003	0.4	0.810	2.7	0	0	Wind Speed 0.9 Direction: E Temperature: 61.5 F Humidity: 86%
	E	12	4	0704 - 1418	0.018	0.8	0.059	1.2	0.0007	0.1	
	C	15	5	0704 - 1418	0	0	1.325	4.4	0.033	0.3	

Notes: Mobile unit; VOC - volatile organic compound; H₂S - hydrogen sulfide; ppm - part per million; wind direction (N-North, S-South, W-West, E-East); F - degrees Fahrenheit; Avg. - Average concentration based on duration of time unit was in operation.

Table 3-14: Week 12 Air Monitoring Summary Table

Date	Area	Station	Area RAE Unit	Monitoring Period	VOC (ppm)		CO (ppm)		H2S (ppm)		Weather Condition
					Avg.	Peak	Avg.	Peak	Avg.	Peak	
5-7	24	E	1	1247 - 1534	0.023	0.4	0.639	1.7	0.110	0.2	Wind Speed 1.9 Direction: NE Temperature: 64.5 F Humidity: 83%
	9	E	4	1247 - 1534	0.094	1.1	0.228	1.7	0	0.1	
	12	E	5	1247 - 1534	0.012	0.5	0.078	1.0	0	0.1	
5-8	24	E	1	1142 - 1429	0.033	1.6	0.005	0.9	0	0	Wind Speed 1.3 Direction: NW Temperature: 64.2 F Humidity: 67%
	9	E	4	1142 - 1429	0.181	1.1	0.030	0.8	0	0	
	15	E	5	1142 - 1429	0.030	0.3	0.688	2.0	0.034	0.1	
5-9	24	E	1	0613 - 1532	0.105	4.6	0.734	4.4	0.74	0.3	Wind Speed 0.2 Direction: E Temperature: 72.0 F Humidity: 65%
	9	E	4	0614 - 1532	0.065	1.1	0.0002	0.2	0.002	0.1	
	15	E	5	0613 - 1532	0.006	0.2	0.870	3.1	0.064	0.3	
5-10	24	E	1	0622 - 1531	0.061	5.2	0.873	2.5	0	0	Wind Speed 0.4 Direction: NNE Temperature: 58.1 F Humidity: 48%
	9	E	4	0755 - 1531	0.017	1.2	0.0001	0.2	0.004	0.1	
	15	E	5	0755 - 1531	0.001	0.1	0.383	1.8	0.010	0.2	
5-11	24	E	1	0612 - 1428	0.111	12.6	0.330	2.1	0.043	0.5	Wind Speed 1.0 Direction: N Temperature: 71.8 F Humidity: 62%
	9	E	4	0612 - 1428	0.315	12.2	0.143	2.0	0	0.3	
	15	E	5	0612 - 1428	0.016	1.2	0.559	2.8	0.39	1.2	

Notes: Mobile unit; VOC - volatile organic compound; H₂S - hydrogen sulfide; ppm - part per million; wind direction (N-North, S-South, W-West, E-East); F - degrees Fahrenheit; Avg. - Average concentration based on duration of time unit was in operation.

Mansfield Trail Dump Site
Removal Activity and Air Monitoring Report
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Table 3-15: Week 13 Air Monitoring Summary Table

Date	Area	Station	Area RAE Unit	Monitoring Period	VOC (ppm)		CO (ppm)		H2S (ppm)		Weather Condition
					Avg.	Peak	Avg.	Peak	Avg.	Peak	
5-14	20	E	1	1112 - 1418	0.221	23.1	0.322	2.0	0	0	Wind Speed 0.4 Direction: NE Temperature: 62.0 F Humidity: 80%
	19	D	4	1132 - 1439	0.069	0.8	0.032	0.8	0.001	0.1	
	8	D	5	1132 - 1439	0.0008	0.1	0.0004	0.1	0.381	1.8	
5-16	20	E	1	0703 - 1453	0.018	1.8	0.058	0.3	0.068	0.7	Wind Speed 0.2 Direction: N Temperature: 73.0 F Humidity 69%
	19	D	4	0703 - 1453	0	0	0.003	0.1	0.015	0.8	
	8	D	5	0703 - 1453	0	0	0.193	3.8	0.032	0.3	
5-17	20	E	1	0652 - 1452	0	0	0	0	0	0	Wind Speed 0.7 Direction: W Temperature: 69.0 F Humidity 27%
	19	D	4	0652 - 1252	0.018	0.4	0	0	0	0	
	8	D	5	0652 - 1252	0	0	0	0	0.082	0.9	

Notes: Mobile unit; VOC - volatile organic compound; H₂S - hydrogen sulfide; ppm - part per million; wind direction (N-North, S-South, W-West, E-East); F - degrees Fahrenheit; Avg. - Average concentration based on duration of time unit was in operation.

Attachment A-1:

Figures

- Figure 1 – Site Location Map**
- Figure 2 – Site Overview Map**
- Figure 3 – Excavation Map**

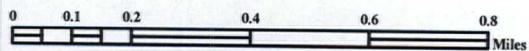


Mansfield Trail Dump Site
 Ross Road/Brookwood Road
 Byram, New Jersey 07874

Legend



Site Location



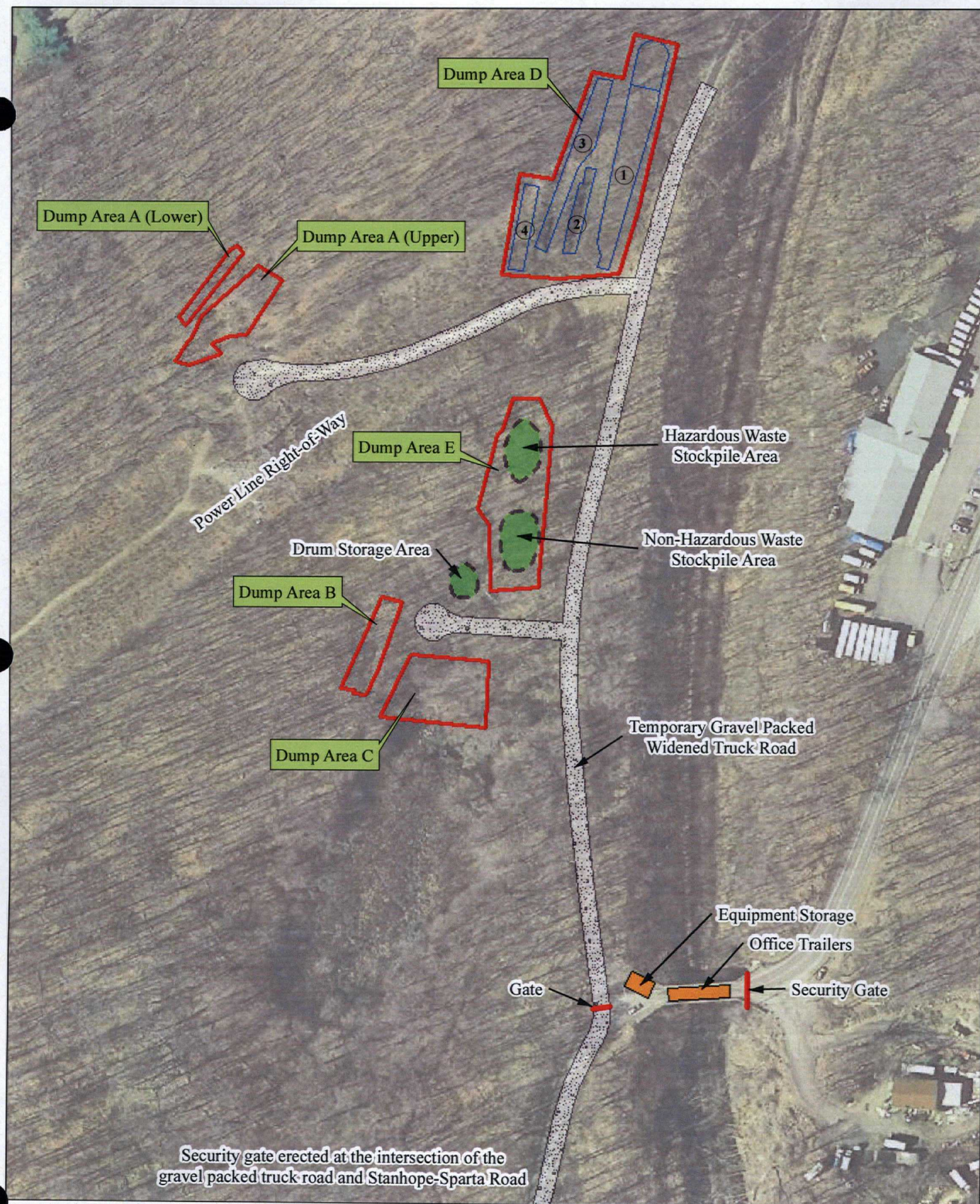
Weston Solutions, Inc.
 Northeast Division

In Association With
 Avatar Environmental, LLC.,
 H & S Environmental, Inc. and
 Scientific and Environmental Associates, Inc.





Figure 1:
Site Location Map
 MANSFIELD TRAIL DUMP SITE
 BYRAM, NEWJERSEY

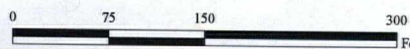
U.S. ENVIRONMENTAL PROTECTION AGENCY
 REMOVAL SUPPORT TEAM 2
 CONTRACT # EP-W-06-072

DATE MODIFIED: 02/20/2012
 GIS ANALYST: F CAMPBELL
 EPA OSC: L DIGUARDIA
 RST SPM: B KELLY
 FILENAME: SITEAFMFXD



Legend

-  Access Road
-  Staging Area
-  Dump Area
-  Area D Trenches



Weston Solutions, Inc.
Northeast Division

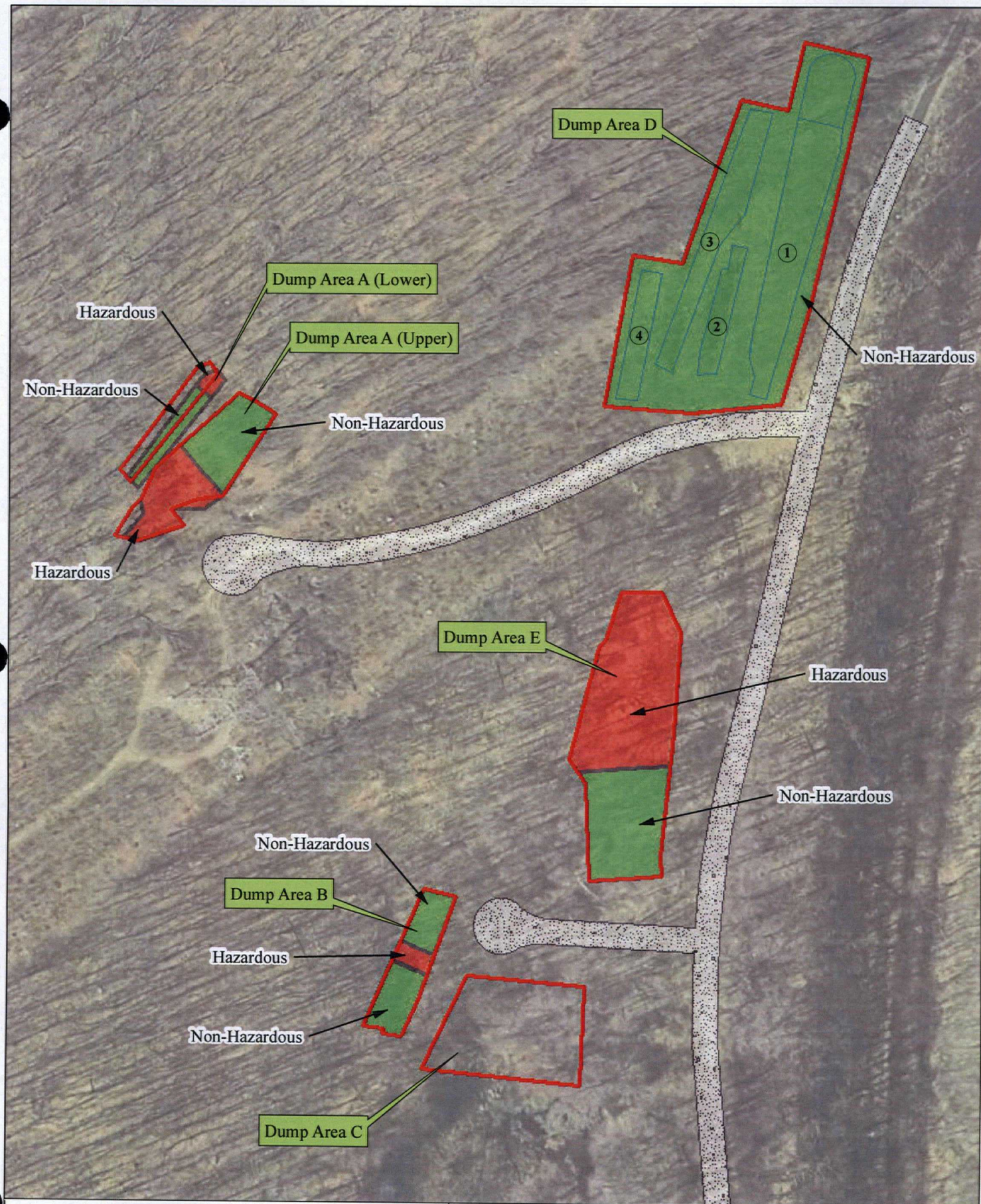
IN ASSOCIATION WITH
AVATAR ENVIRONMENTAL, LLC.,
H & S ENVIRONMENTAL, INC. AND
SCIENTIFIC AND ENVIRONMENTAL ASSOCIATES, INC.

Figure 2: Site Overview Map

MANSFIELD TRAIL DUMP
BYRAM TOWNSHIP, NEW JERSEY
U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM 2
CONTRACT # EP-W-06-072

DRAWN BY:	P. LISICHENKO
EPA OSC:	L. DIGUARDIA
RST SPM:	B. KELLY
FILENAME:	MTD_SiteOverviewMap.mxd

DATE MODIFIED: 12/26/2012



Weston Solutions, Inc.
 Northeast Division

IN ASSOCIATION WITH
 AVATAR ENVIRONMENTAL, LLC.,
 H & S ENVIRONMENTAL, INC AND
 SCIENTIFIC AND ENVIRONMENTAL ASSOCIATES, INC.

Attachment A-2:

Photo Documentation Log

Photographic Documentation
Mansfield Trail Dump Site
Dump Area A



Photograph 1: A view of Dump Area A, taken on 2/23/12 at 0850 hrs.



Photograph 2: A view of Dump Area A test pit sampling, taken on 2/24/12 at 1243 hrs.

**Photographic Documentation
Mansfield Trail Dump Site
Dump Area A**



Photograph 3: A general view of Dump Area A excavation activities in Lower Trench of facing South, taken on 3/12/12 at 1026 hrs.



Photograph 4: A general view of Dump Area A excavation activities between Upper and Lower Trench facing South, taken on 3/13/12 at 1010 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area A



Photograph 5: A general view of Dump Area A excavation activities in Lower Trench facing West, taken on 3/14/12 at 0908 hrs.



Photograph 6: A general view of Dump Area A excavation activities in Upper Trench facing North, taken on 3/20/12 at 1208 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area A



Photograph 7: A close view of Dump Area A Upper Trench facing North, taken on 3/20/12 at 1211 hrs.



Photograph 8: A general view of Dump Area A excavation activities in Upper Trench facing East, taken on 3/20/12 at 1210 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area A



Photograph 9: A close view of Dump Area A Upper Trench facing South, taken on 3/20/12 at 1206 hrs.



Photograph 10: A North facing view Dump Area A Lower Trench, taken on 3/20/12 at 1209 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area A



Photograph 11: A North facing view of Dump Area A Lower Trench, taken on 4/20/12 at 0800 hrs.



Photograph 12: A North facing view of Dump Area A Lower Trench, taken on 4/20/12 at 1209 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area A



Photograph 13: A North facing view of Dump Area A Lower Trench, taken on 5/08/12 at 1209 hrs.



Photograph 14: A North facing view of Dump Area A Lower Trench, taken on 5/13/12 at 1209 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area B



Photograph 1: A view of Dump Area B following the construction of an earthen berm road, taken on 2/15/12 at 1236 hrs.



Photograph 2: A view of Dump Area B prior to removal activities, taken on 2/16/12 at 1024 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area B



Photograph 3: A view of Dump Area B, ERRS collecting soil samples, taken on 2/22/12 at 1433 hrs.



Photograph 4: A view of Dump Area B excavation activities for a dewatering retention basin facing South, taken on 3/07/12 at 1431 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area B



Photograph 5: A view of Dump Area B excavation activities for a dewatering retention basin facing South, taken on 3/07/12 at 1431 hrs.



Photograph 6: A view of Dump Area B excavation activities for a dewatering retention basin facing South, taken on 3/07/12 at 1432 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area B



Photograph 7: A view of Dump Area B facing North West, taken on 3/14/12 at 0906 hrs.



Photograph 8: A view of Dump Area B, sump pumping activities facing South, taken on 3/15/12 at 0859 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area B



Photograph 9: A view of Dump Area B excavation of non –hazardous material with the addition of kiln dust for dewatering, taken on 3/22/12 at 0926 hrs.



Photograph 10: A view of Dump Area B excavation activities, taken on 3/22/12 at 1143 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area B



Photograph 11: A view of Dump Area B removal of the road berm, taken on 3/23/12 at 1124 hrs.



Photograph 12: A general view of Dump Area B facing South, taken on 3/28/12 at 1305 hrs following post excavation soil sampling event.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area B



Photograph 13: A close view of Area B marked sample points in to be removed, taken on 4/18/12 at 1319 hrs.



Photograph 15: A view of the excavation in Dump Area B after sample locations that were above action levels were removed, taken on 5/14/12 at 1433 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area B



Photograph 15: A view of Area B completed restoration including hydro seeding, taken on 7/13/12.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area C



Photograph 1: A view of Dump Area C, ERRS collecting soil samples, taken on 2/22/12 at 1353 hrs.



Photograph 2: A view of Dump Area C, ERRS collecting soil samples, taken on 2/22/12 at 1407 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area C



Photograph 3: A view of Dump Area C during RST 2 sampling event facing South, taken on 3/14/12 at 0900 hrs.



Photograph 4: A view of Dump Area C after ERRS cleared brush and hydro seeded disturbed area, taken on 7/13/12 at 1406 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area D



Photograph 1: A view of Dump Area D prior to removal activities, taken on 2/17/12 at 0915 hrs.



Photograph 2: A view of Dump Area D, test pit sampling, taken on 3/2/12 at 1510 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area D



Photograph 3: An overview of Dump Area D facing Northwest prior to excavation activities, taken on 2/28/2012 at 1419 hrs.



Photograph 4: A view of Dump Area D Trench 4 excavated to bedrock, taken on 3/19/12 at 1223 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area D



Photograph 5: A view of Dump Area D excavation of Trench 3, taken on 3/26/12 at 1001 hrs.



Photograph 6: A view of Dump Area D completed excavation of the South end of Trench 3 and the sumps in Trench 2, taken on 3/27/12 at 0947 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area D



Photograph 7: A view of Dump Area D excavation in the northern section of Trench 3, taken on 3/27/12 at 0952 hrs.



Photograph 8: A view of Dump Area D excavation of the black material in the northern section of Trench 3, taken on 3/28/12 at 1137 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area D



Photograph 9: A view of Dump Area D, taken by ERRS operator from excavator cab at the northern section of Trench 3 following the removal of the black material, taken on 3/28/12 at 1440 hrs.



Photograph 10: A view of Dump Area D, excavation material from Trench 3, taken on 4/3/12 at 1052 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area D



Photograph 11: A view of Dump Area D, mixing kiln dust to bind material in Trench 2, taken on 4/10/12 at 1052 hrs.



Photograph 12: A distant view of Dump Area D and material excavation in Trench 2, taken on 4/11/12 at 0840 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area D



Photograph 13: A close view of Dump Area D and material excavation in Trench 2, taken on 4/12/12 at 1051 hrs.



Photograph 14: A general view of Dump Area D excavation, taken on 4/20/12 at 1356 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area D



Photograph 15: A general view of Dump Area D excavation, taken on 5/9/12 at 0948 hrs.



Photograph 16: A general view of Dump Area D backfilling and grading, taken on 5/11/12 at 1055 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area D



Photograph 17: A general view of Dump Area D, backfilling and grading, taken on 5/14/12 at 0853 hrs.



Photograph 18: A general view of Dump Area D, backfilling and grading, taken on 5/17/12 at 1445 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area D



Photograph 19: A general view of Dump Area D grading, taken on 5/18/12 at 0952 hrs.



Photograph 20: A view of Dump Area D and completed removal activities, taken on 5/22/12 at 1250 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area D



Photograph 21: A general view of Dump Area D, post restoration of facing North East taken on 7/13/12 at 1300.



Photograph 22: A general view of Dump Area D post restoration facing West, taken on 7/13/12 at 1310.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area D



Photograph 23: A general view of Dump Area D post restoration facing North, taken on 7/13/12 at 1312.



Photograph 24: A general view of Dump Area D post restoration facing Northwest, taken on 7/13/12 at 1317.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area E



Photograph 1: A view of Dump Area E prior to removal activities, taken on 2/17/12 at 0905 hrs.



Photograph 2: A view Dump Area E after grading and preparation for stock piles, taken on 3/8/12 at 1017 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area E



Photograph 3: A view of Dump Area E hazardous stock pile in staging area, taken on 3/20/12 at 1216 hrs.



Photograph 4: A view of Dump Area E non-hazardous stock pile in staging area, taken on 4/3/12 at 1106 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area E



Photograph 5: A view of Area E non-hazardous materials stock pile in staging area, taken on 4/16/12 at 1141 hrs.



Photograph 6: A view of Area E non-hazardous (rear) and hazardous (front) stock piles staging area, taken on 4/25/12 at 0817 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area E



Photograph 7: A view of Dump Area E stock pile activities in staging area 3, taken on 5/9/12 at 0940 hrs.



Photograph 8: A view of Dump Area E after the hazardous pile and material were removed, taken on 5/10/12 at 1318 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area E



Photograph 9: A view of Dump Area E after stock piles were removed, including the removal of 2 to 3 feet of material below the piles, taken on 5/17/12 at 1248 hrs.



Photograph 10: A view of Dump Area E backfilling, taken on 05/22/12 at 1247 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area E



Photograph 11: A view of Dump Area E, backfilling and grading, taken on 5/22/12 at 1259 hrs.



Photograph 12: A view of Dump Area E after completed removal activities, taken on 5/24/12 at 0829 hrs.

Photographic Documentation
Mansfield Trail Dump Site
Dump Area E



Photograph 13: A view of Dump Area E, the northern portion, taken on 7/13/12 at 1329.



Photograph 14: A view of Dump Area E completed removal activities, taken on 7/13/12 at 1333.

Attachment B

Pre-Delineation, Post Confirmation, and Waste Characterization Soil Sampling Trip Report

Section 1	SAMPLING EVENT: SAMPLE DATES:	Pre-Delineation Soil Sampling Event – Dump Area C March 12 to 14, 2012
Section 2	SAMPLE EVENT: SAMPLE DATES:	Post-Confirmation Soil Sampling March 15 to 16 and 27 to 29, 2012
Section 3	SAMPLING EVENT: SAMPLE DATE:	Waste Characterization Test Pit Sampling February 22, 23, 27, March 2, April 12, 2012

SECTION 1 Pre-Delineation Soil Sampling

1.0 Removal Action Sampling Event Summary:

From March 12 to 14, 2012, as part U.S. Environmental Protection Agency (EPA) Removal Action, Weston Solutions, Inc., Removal Support Team 2 (RST 2) collected a total of 79 soil samples, including five field duplicates for target compounds list (TCL) volatile organic compounds (VOC) analysis from Dump Areas C and E. The contaminant of concern is trichloroethene (TCE) with a site action level of 1,000 micrograms per kilogram ($\mu\text{g}/\text{kg}$). Sample location methodology was determined by the EPA On-Scene Coordinator (OSC). Sampling activities were conducted in accordance with EPA Environmental Response Team (ERT) Standard Operating Procedure (SOP) #2001, 2006, and 2012. As specified in the site-specific health and safety plan, modified Level D personal protective equipment was worn during the sampling event and included Tyvek suit, latex boot covers, gloves, protective eyewear, hard hat, and high visibility safety vest.

2.0 Sample Collection Information:

Refer to the following figures and tables for the location and summary of samples collected by RST 2.

Attachment B-1:

- Figure 4 - Dump Area C Pre-Delineation Sample Locations

Attachment B-2:

- Table 1a - Pre-Delineation Sample Collection Summary

3.0 Sampling Methodology:

3.1 Dump Area C Sampling:

From March 12 to 14, 2012, RST 2 collected a total of 59 soil samples, including three field duplicates, from Dump Area C to determine the area's removal eligibility and delineation of its excavation boundary. A 100 foot by 60 foot dimension was selected in this area for a 10-foot by 10-foot grid pattern sample collection. There were seven columns and ten rows. The desired sample depth range was 2 to 24 inches below ground surface (bgs) with an average depth of 2 to 12 inches. In instances where refusal was encountered (i.e. rocks, roots, debris, etc.) samples were taken at the refusal depth. All soil samples from surface to reached depth were collected in aluminum pans prior to being transferred into four 5-gram Encore containers to be submitted to the laboratory for VOC analysis and one 8-oz glass jar to be submitted to the laboratory for soil moisture. A stainless steel shovel was utilized to reach appropriate depth. Enough shovels were available onsite to allow for one shovel per sample location, decontamination of these tools occurred once daily. One rinsate blank sample was collected per day from non-dedicated sampling equipment to ensure proper decontamination of hand tools.

4.0 Personnel Participating in Sampling Event:

Name	Representing	Duties
Lou DiGuardia	EPA, Region II	On-Scene Coordinator
Brittney Kelly	RST 2, Region II	Site Project Manager, Sample Collection, Sample Management, Site Health and Safety
Sean Hettinger	RST 2, Region II	Sample Collection

5.0 Laboratory Information:

Sample Matrix	Sample Quantity	Analyses	Laboratory
Soil	59	TCL VOCs, DESA Method No. C-123	U.S. EPA, Region II - Division of Environmental Science and Assessment Laboratory 2890 Woodbridge Ave. Edison, NJ 08837
	59	Soil Moisture	

EPA = U.S. Environmental Protection Agency DESA = Division of Environmental Science and Assessment

6.0 Sample Dispatch Data:

On March 12, 2012, RST 2 hand-delivered the 20 soil samples, including one field duplicate, to the EPA Division of Environmental Science and Assessment (DESA) laboratory located in Edison, New Jersey. All samples were relinquished to the laboratory under Chain of Custody Record Number 2-031212-182347-0001.

On March 13, 2012, RST 2 hand-delivered the 20 soil samples, including one field duplicate, to the EPA DESA laboratory located in Edison, New Jersey. All samples were relinquished to the laboratory under Chain of Custody Record Number 2-031312-175357-0003.

On March 14, 2012, RST 2 hand-delivered the 19 soil samples, including one field duplicate, to the EPA DESA laboratory located in Edison, New Jersey. All samples were relinquished to the laboratory under Chain of Custody Record Number 2-031412-165440-0004.

Refer to Attachment B-3 for a copy of the Chain of Custody Records.

7.0 Analytical Discussion:

7.1 Dump Area C:

The analytical results for the soil samples collected from Dump Area C from March 12 to 14, 2012 were below the criteria contaminant concentrations listed on the New Jersey Department of Environmental Protection (NJDEP) Site Remediation Soil Cleanup Standards for soils which have impact to ground water. The OSC determined by the analytical results that Dump Area C did not contain soil contaminants which warranted removal in this area. No further action will be taken in this area of the site.

Attachment B-2:

- Table 2 - Area C Analytical Summary Table

Attachment B-4:

- NJDEP Soil Cleanup Criteria

SECTION 2 Post-Confirmation Soil Sampling

1.0 Removal Action Sampling Event Summary:

From March 15 to 28, 2012, RST 2 collected a total of 93 soil samples, including five field duplicates, for TCL VOC analysis in Dump Areas A, B and D following excavation activities to confirm the complete removal of contaminated soils. The contaminant of concern is TCE with a site action level of 1,000 µg/kg. Dump Areas A, B and Trench 4 of Dump Area D were excavated by the Emergency Rapid Response Services (ERRS) Contractor to bedrock. All exposed rock was swept off with push brooms by ERRS personnel, and the excavated material was stockpiled in Dump Area E staging area for removal. The sample locations were determined by the EPA OSC. Sampling activities were conducted in accordance with EPA ERT SOP #2001, 2006, and 2012. As specified the site specific health and safety plan, modified Level D personal protective equipment was worn during the sampling event and included Tyvek suit, latex boot covers, gloves, protective eyewear, hard hat, and high visibility safety vest.

2.0 Sample Locations:

Refer to the following figures and tables for the location of the samples collected by RST 2.

Attachment B-1:

- Figure 5 - Dump Area E Pre-Delineation Sample Locations

- Figure 6 - Dump Area A Post-Confirmation Sample Location
- Figure 7 - Dump Area B Post-Confirmation Sample Location
- Figure 8 - Dump Area D Post-Confirmation Sample Location

Attachment B-2

- Table 1b - Post-Confirmation Sample Collection Summary

3.0 Sampling Methodology

3.1 Dump Area A Sampling

On March 15 and 16, 2012, RST 2 collected a total of 13 soil samples, including one field duplicate, from the Lower Trench of Dump Area A, and 28 soil samples, including one field duplicate, from the Upper Trench of Dump Area A for Post Excavation Confirmation. In the Lower Trench, grab samples were taken approximately every 15 feet from the side walls and one row in the middle of trench from bedrock cracks. Dedicated sampling equipment was used for samples collected in Dump Area A on March 15, 2012, therefore a rinsate blank was not collected. Grab samples were collected and transferred directly into four 5-gram Encore containers and one 8-oz glass jar to be submitted to the laboratory for VOC and soil moisture analysis.

3.2 Dump Area B Sampling

On March 27, 2012, RST 2 collected a total of 21 soil samples, including one field duplicate, from the trench in Dump Area B. Samples were collected along two rows with sample points spaced approximately 12 feet apart with 10 sample locations in each row. Soil samples were collected from 1 to 3 inches bgs into aluminum pans in order to sift out rocks and debris prior to being transferred into four 5 gram Encore containers and one 8 oz glass jar to be submitted to the laboratory for VOC and soil moisture analysis.

3.3 Dump Area D Sampling

On March 28, 2012, RST 2 collected a total of 11 soil samples, including one field duplicate, from trench 4 of Dump Area D. Sample locations were spaced 10 feet apart along the excavated trench boundary and one row along the middle. Grab samples were collected and transferred directly into four 5-gram Encore containers and one 8-oz glass jar to be submitted to the laboratory for VOC and soil moisture analysis.

3.4 Dump Area E Sampling

On March 29, 2012, as directed by OSC, RST 2 collected a total of 20 soil samples, including one field duplicate, from the perimeter boundary of Dump Area E to re-confirm the boundary of this area to assure contamination from the stock piles located in this area did not affect areas past the double layered silt fence. A grab sample was collected every 15 feet on the outside of the silt fence near the stock pile at the south end of Dump Area E, and on the inside of the silt fence at the north end of the area. Dedicated sampling equipment was used for samples collected in Dump Area E, therefore a rinsate blank was not collected. Soil samples were collected from 1 to 3 inches bgs and transferred into aluminum pans in order to sift out rocks and debris. Soil samples for laboratory analysis were transferred into four 5-gram encore samples for VOC analysis and one 8-oz glass jar for soil moisture.

Refer to the following attachments for a complete summary of the analytical results and action levels. The criteria column for Soil with Impact to Groundwater was the designated cleanup standards for the site.

4.0 Personnel Participating in Sampling Event:

Name	Representing	Duties
Lou DiGuardia	EPA, Region II	On-Scene Coordinator
Brittney Kelly	RST 2, Region II	Site Project Manager, Sample Collection, Sample Management, Site Health and Safety
Sean Hettinger	RST 2, Region II	Sample Collection
Mark Conover	RST 2, Region II	Sample Collection

5.0 Laboratories Receiving Samples:

Sample Matrix	Sample Quantity	Analyses	Laboratory
Soil	113	TCL VOCs, DESA Method No. C-123	U.S. EPA, Region II - Division of Environmental Science and Assessment Laboratory 2890 Woodbridge Ave. Edison, NJ 08837
	113	Soil Moisture	

EPA = U.S. Environmental Protection Agency

DESA = Division of Environmental Science and Assessment

6.0 Sample Dispatch Data:

On March 15, 2012, RST 2 hand-delivered the 20 soil samples, including one field duplicate, to the EPA DESA laboratory located in Edison, New Jersey. All samples were relinquished to the laboratory under Chain of Custody Record Number 2-031512-154337-0006.

On March 16, 2012, RST 2 hand-delivered the 21 soil samples, including one field duplicate, to the EPA DESA laboratory located in Edison, New Jersey. All samples were relinquished to the laboratory under Chain of Custody Record Number 2-031612-111345-0008.

On March 27, 2012, RST 2 hand-delivered the 21 soil samples, including one field duplicate, to the EPA DESA laboratory located in Edison, New Jersey. All samples were relinquished to the laboratory under Chain of Custody Record Number 2-032712-082946-0014.

On March 28, 2012, RST 2 hand-delivered the 11 soil samples, including one field duplicate, to the EPA DESA laboratory located in Edison, New Jersey. All samples were relinquished to the laboratory under Chain of Custody Record Number 2-032812-152855-0016.

On March 29, 2012, RST 2 hand-delivered the 20 soil samples, including one field duplicate, to the EPA DESA laboratory located in Edison, New Jersey. All samples were relinquished to the laboratory under Chain of Custody Record Number 2-032912-134704-0018.

Refer to Attachment B-3 for a copy of the Chain of Custody Records.

7.0 Analytical Discussion:

7.1 Dump Area A:

In the Upper Trench of Dump Area A, the following sample was above the 1,000 micrograms per kilogram ($\mu\text{g/kg}$) Action Level for TCE: S-129-3033-001 (6,600 $\mu\text{g/kg}$). The following samples were within 10 percent of the action limit and were also removed: S-131-2223-001 (190 $\mu\text{g/kg}$), S-132-4041-001 (250 $\mu\text{g/kg}$). On April 19th, 2012, the ERRS crew removed soil at these sample location points to bedrock. In the process of removing these sample points, a black waste material was discovered at the edge of the excavated area. The ERRS crew increased the excavated area until bedrock was reached. OSC did not require RST 2 to resample this area since excavation was to bedrock.

Refer to Attachment B-1 - Figure 6 Dump Area A Post-Confirmation Sample Locations Map for the re-excavated portion of the upper trench in Dump Area A.

7.2 Dump Area B:

The following sample location contained an elevated concentration of 1,2-Dichlorobenzene: S-154 (6,900 $\mu\text{g/kg}$). On April 25, 2012, ERRS removed additional soil around this sample location to bedrock. The OSC did not require re-sampling since bedrock was reached.

7.3 Dump Area D:

All samples collected from Dump Area D, Trench 4 were below the Action Levels and did not warrant further excavation as specified by the OSC. Post-confirmation sampling could not be safely obtained in Trenches 1-3 due to over steepening of side walls (10 to 18 feet in height). The ERRS operator excavated to bedrock in depth and extended the width of the excavation until virgin soil was reached that contained neither black waste material nor debris. The May and June 2010 Integrated Assessment (IA) sampling events during the 2010 Removal Assessment was used for the delineation boundaries of Dump Area D. Refer to Attachment B-1 - Figure 8 and Attachment B-2 - Tables 7 and 8.

7.4 Dump Area E:

All samples collected from the perimeter of Dump Area E were below action levels for target compound, TCE and did not warrant further excavation as specified by the OSC.

Refer to the following attachments for a complete summary of the analytical results and action levels. The criteria column for soil with impact to groundwater was the designated cleanup standards for the site.

Attachment B-2:

- Table 3 - Area E Analytical Summary Table
- Table 4 - Dump Area A Analytical Summary Table
- Table 5 - Dump Area B Analytical Summary Table
- Table 6 - Dump Area D Trench 4 Analytical Summary Table

Attachment B-4:

- NJDEP Soil Cleanup Criteria

SECTION 3

Waste Characterization Test Pit Sampling

1.0 Removal Action Event Summary:

From February 22 to March 2, 2012, ERRS excavated 40 test pit locations in Dump Areas A, B, C, D and E and collected a total of 42 composite samples, including two field duplicate, to be analyzed for removal off-site. RST 2 conducted oversight of ERRS sampling event.

On April 12, 2012, RST 2 collected two soil samples from Trench 2 in Dump Area D for waste characterization analysis for the purpose of removal and disposal at a CERLCA compliant landfill. This material was sampled due to the obvious physical differences between the material currently being excavated, and the rest of the excavated material which was consistent with the soil sampled from the original test pits for waste characterization.

2.0 Sample Collection Information

Attachment B-1:

- Figure 8 - Dump Area D Post-Confirmation Soil Sample Location (for the location the two samples collected on April 12, 2012)
- Figure 9 - Waste Characterization Test Pit Locations

Attachment B-2

- Table 1c - Waste Characterization Sample Collection Summary

3.0 Sampling Methodology

ERRS collected Waste Characterization Analysis Samples in Dump Area D, Trench 4 from excavated test pits. Due to the excavator operating under high tension power lines, the excavator was grounded with copper cables to a grounding rod. ERRS personal protective equipment (PPE) included: Tyvek suits, latex boot covers, protective eyewear, hard hat and respirator. ERRS crew collected samples from excavator bucket with a plastic scope and placed equal parts of soil into a 5-gallon bucket from the excavator bucket. Each test pit sampling location was comprised of five sub-locations each approximately two-feet apart from a center point. Sample depth was determined as the depth to ground water or depth to bedrock within the test pit.

The two samples collected by RST 2 on April 12, 2012, were grab samples from excavator bucket scoop taken from the bottom of the excavation pit at an approximate depth of 15 feet. The sample was collected using a dedicated plastic scoop. RST 2 personnel wore the following PPE while collecting samples: latex boot covers, safety glasses, hard hat, and high visibility safety vest.

4.0 Personnel Participating in Sampling Event:

Name	Representing	Duties for Sampling Event
Lou DiGuardia	EPA, Region II	On-Scene Coordinator
Brittney Kelly	RST 2, Region II	Site Project Manager, Sample collection oversight
Joe Overend	ERRS, RM	Remedial Manager
Tom Williams	ERRS, RM	Remedial Manager
Technicians	ERRS	Sample collection

5.0 Laboratory Receiving Samples:

Sample Matrix	Sample Quantity	Analyses	Laboratory
Soil	42	Full TCLP (RCRA 8 metals, VOC, SVOC, Herbicides, Pesticides), Ignitability, Corrosivity/pH, Reactive Cyanide/Sulfide TPH DRO, TPH GRO, Total (VOC, SVOC, RCRA 8 metals)	York Analytical Laboratories 120 Research Dr. Stratford, CT 06615
Soil	2	Full TCLP (RCRA 8 metals, VOC, SVOC, Herbicides, Pesticides), Ignitability, Corrosivity/pH, Reactive Cyanide/Sulfide TPH DRO, TPH GRO,	

6.0 Sample Dispatch Data:

On February 28, 2012, a courier service picked up 22 soil samples to hand-deliver to York Analytical Laboratories in Stratford Connecticut under project ID MT2-42 and Purchase Order No. 8120. No Chain of Custody identification number available.

On March 6, 2012, a courier service picked up 20 soil samples to hand-deliver to York Analytical Laboratories in Stratford Connecticut under project ID MT2-42 and Purchase Order No. 8120. No Chain of Custody identification number available.

On April 13, 2012, custody of 2 soil samples were transferred from RST 2 to ERRS contractor (ER, LLC) to courier service to be hand-delivered to York Analytical Laboratories in Stratford Connecticut under project ID MT2-42 and Purchase Order No. 8120. No Chain of Custody identification number available.

Refer to Attachment B-3 for the Chain of Custody Records.

7.0 Analytical Discussion:

The EPA OSC used the analytical data from the soil samples collected from the test pits to determine the boundaries of hazardous material from non-hazardous material for the purpose of disposal in accordance with U.S. EPA RCRA criteria.

The analytical results for samples MTD-041212-AreaD-01 and MTD-041212-AreaD-02 characterize the waste as non-hazardous according to U.S. EPA RCRA criteria and consistent with previously analyzed material from Dump Area D collected on March 6, 2012.

Refer to the following attachments for additional information.

Attachment A-1: Figures

- Figure 3 – Excavation Map

Attachment B-1: Figures

- Figure 9 – Figure 9 Waste Characterization Test Pit Locations Map

Attachment B-5: Laboratory Analytical Reports

Attachment B-1:

Figures

Figure 4 – Dump Area C Pre-Delineation Sample Locations

Figure 5 – Dump Area E Pre-Delineation Sample Locations

Figure 6 – Dump Area A Post-Confirmation Sample Locations

Figure 7 – Dump Area B Post-Confirmation Sample Locations

Figure 8 – Dump Area D Post-Confirmation Sample Locations

Figure 9 – Waste Characterization Test Pit Locations



Legend

- Dump Area C Sample Locations
- Access Road
- Dump Areas

0 12.5 25 50
Feet

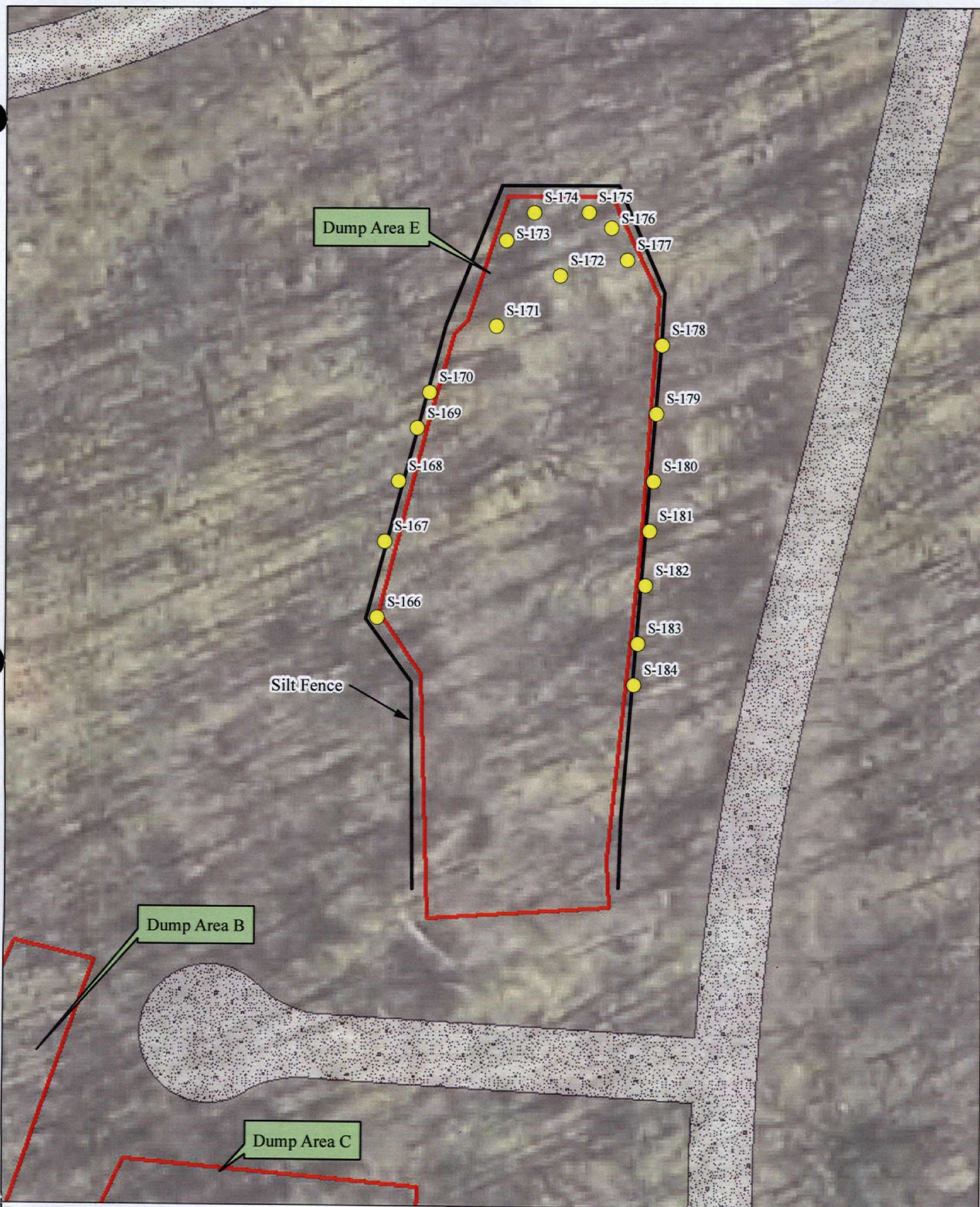


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Northeast Division

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H & S ENVIRONMENTAL, INC. AND
SCIENTIFIC AND ENVIRONMENTAL ASSOCIATES, INC.

Figure 4: Dump Area C Pre-Delineation Sample Locations	
MANSFIELD TRAIL DUMP BYRAM TOWNSHIP, NEW JERSEY	
U.S. ENVIRONMENTAL PROTECTION AGENCY REMOVAL SUPPORT TEAM 2 CONTRACT # EP-W-06-072	
DRAWN BY:	P. LISICHENKO
EPA OSC:	L. DIGUARDIA
RST SPM:	B. KELLY
FILENAME:	MTD_DAC_SampleLoc.mxd

DATE MODIFIED: 12/26/2012



Legend

- Dump Area E Sample Locations
- Silt Fence
- Access Road
- Dump Areas

0 20 40 80
Feet



Weston Solutions, Inc.
Northeast Division

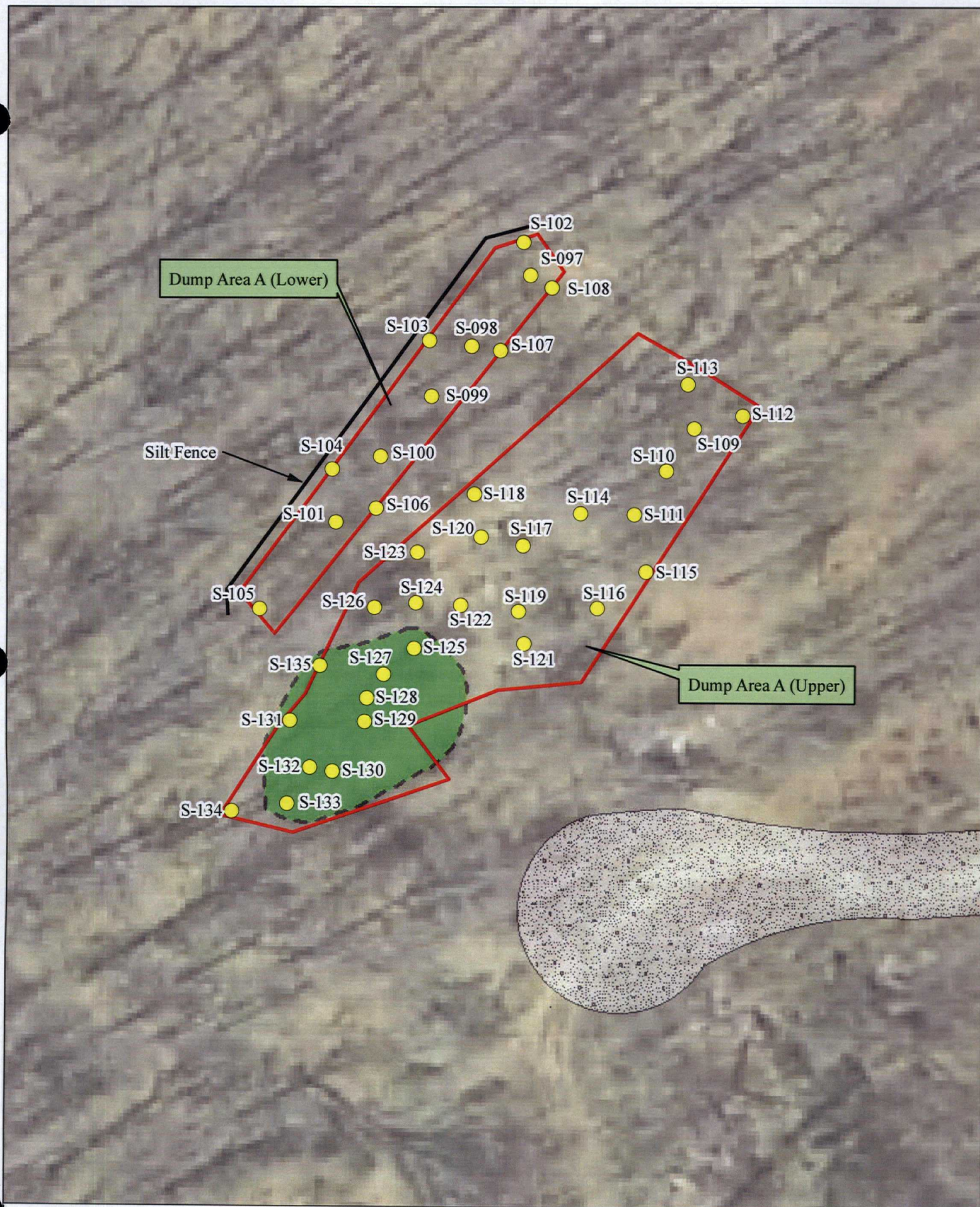
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AVATAR ENVIRONMENTAL, LLC,
H & S ENVIRONMENTAL, INC. AND
SCIENTIFIC AND ENVIRONMENTAL ASSOCIATES, INC.

**Figure 5: Dump Area E
Pre-Delineation Sample Locations**

MANSFIELD TRAIL DUMP
BYRAM TOWNSHIP, NEW JERSEY
U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM 2
CONTRACT # EP-W-06-072

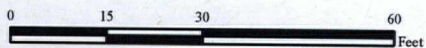
DRAWN BY:	P. LISCHENKO
EPA OSC:	L. DIGUARDIA
RST SPM:	B. KELLY
FILENAME:	MTD DAE Sample Loc.mxd

DATE MODIFIED: 12/26/2012



Legend

- Dump Area A Sample Locations
- Silt Fence
- Area of Re-excitation
- Access Road
- Dump Areas



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Figure 6: Dump Area A Post-Confirmation Sample Locations	
MANSFIELD TRAIL DUMP	
BYRAM TOWNSHIP, NEW JERSEY	
U.S. ENVIRONMENTAL PROTECTION AGENCY	
REMOVAL SUPPORT TEAM 2	
CONTRACT # EP-W-06-072	
DRAWN BY:	P. LISCHENKO
EPA OSC:	L. DIGUARDIA
RST SPM:	B. KELLY
FILENAME:	MTD DAA SampleLoc.mxd

DATE MODIFIED: 12/26/2012



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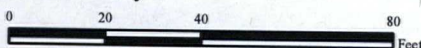
Figure 7: Dump Area B Post-Confirmation Sample Locations	
MANSFIELD TRAIL DUMP	
BYRAM TOWNSHIP, NEW JERSEY	
U.S. ENVIRONMENTAL PROTECTION AGENCY	
REMOVAL SUPPORT TEAM 2	
CONTRACT # EP-W-06-072	
DRAWN BY:	P. LISICHENKO
EPA OSC:	L. DIGUARDIA
RST SPM:	B. KELLY
FILENAME:	MTD DAB SampleLoc.mxd

DATE MODIFIED: 12/26/2012



Legend

- Dump Area D Sample Locations
- May-June 2010 Integrated Assessment Delineation Sample Point
- Access Road
- Dump Area D Trench Boundary
- Dump Areas



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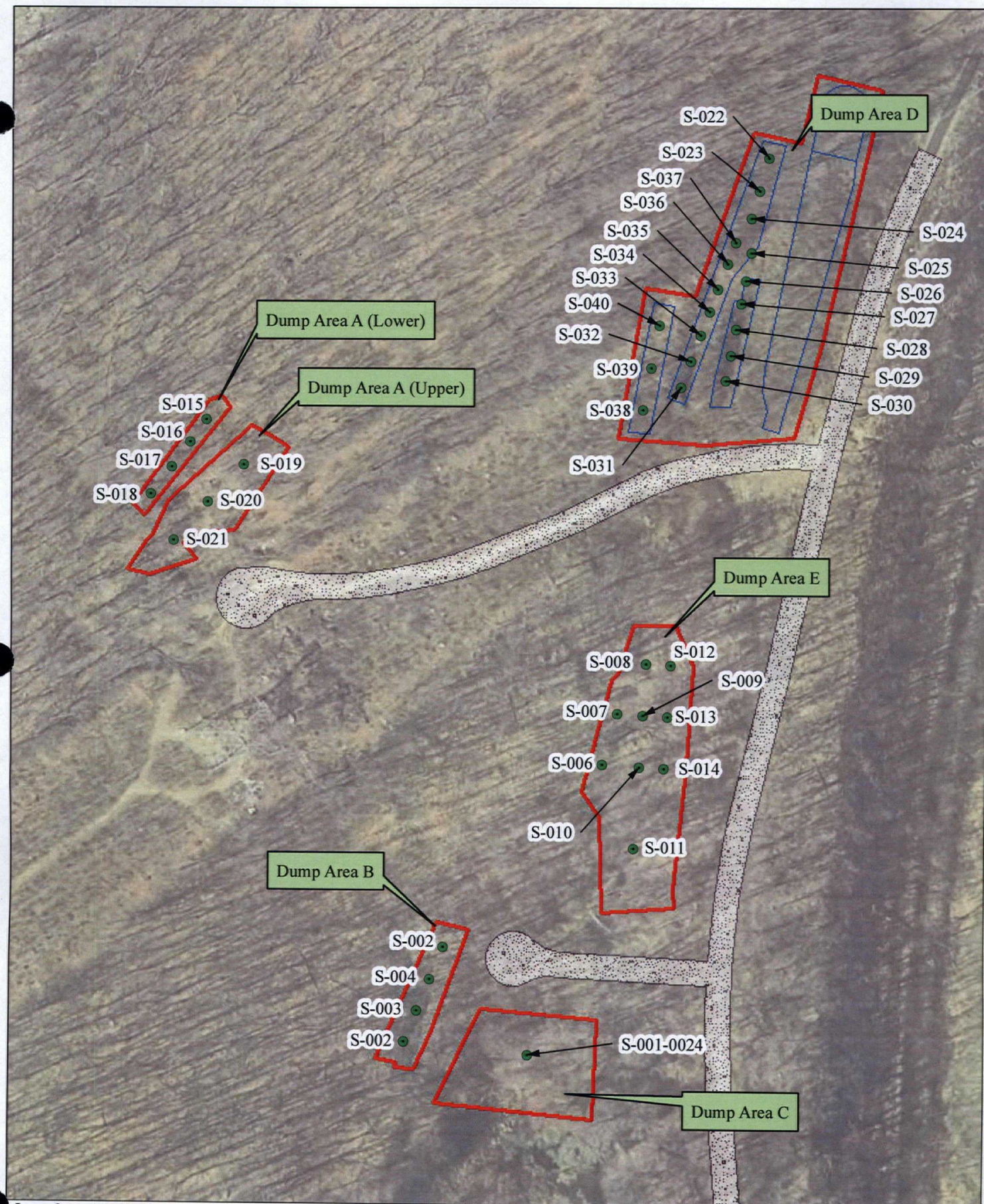
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**Figure 8: Dump Area D
Post-Confirmation Sample Locations**

MANSFIELD TRAIL DUMP
BYRAM TOWNSHIP, NEW JERSEY
U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM 2
CONTRACT # EP-W-06-072

DRAWN BY: P. L. ISICHENKO
EPA OSC: L. DIGUARDIA
RST SPM: B. KELLY
FILENAME: MTD DAD SampleLoc.mxd

DATE MODIFIED: 12/26/2012



Legend

- Waste Characterization Test Pit Sample Locations
- Dump Area
- Area D Trenches

0 50 100 200 Feet



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AVATAR ENVIRONMENTAL, LLC,
H & S ENVIRONMENTAL, INC AND
SCIENTIFIC AND ENVIRONMENTAL ASSOCIATES, INC.

Figure 9: Waste Characterization Test Pit Locations

MANSFIELD TRAIL DUMP
BYRAM TOWNSHIP, NEW JERSEY
U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM 2
CONTRACT # EP-W-06-072

DRAWN BY:	P. LISICHENKO
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RST SPM:	B. KELLY
FILENAME:	MTD_WasteCharacterizationLoc.mxd

DATE MODIFIED: 12/26/2012

Attachment B-2:

Data Summary Tables

Table 1a – Pre-Delineation Soil Sample Collection Summary

Table 1b – Post-Confirmation Soil Sample Collection Summary

Table 1c – Waste Characterization Sample Collection Summary

Table 2 – Dump Area C Analytical Summary Table

Table 3 – Dump Area E Analytical Summary Table

Table 4 – Dump Area A Analytical Summary Table

Table 5 – Dump Area B Analytical Summary Table

Table 6 – Dump Area D Trench 4 Analytical Summary Table

Table 7 – Waste Characterization Analytical Summary Table

Table 1a.
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Mansfield Trail Dump Site
March 12 to 29, 2012

Sample ID	Sample Location	Sample Area	Depth (ft)	Sample Date	Sample Time	Matrix	Collection	Sample Type	Container Type	Analysis
S-041-0210-001	S-041	Dump Area C	2 - 10	3/12/2012	13:30	Soil	Grab	MS/MSD	Encore	TCL VOCs
S-041-0210-002	S-041	Dump Area C	2 - 10	3/12/2012	13:30	Soil	Grab	FD	Encore	TCL VOCs
S-042-0207-001	S-042	Dump Area C	2 - 7	3/12/2012	13:45	Soil	Grab	FS	Encore	TCL VOCs
S-043-0212-001	S-043	Dump Area C	2 - 12	3/12/2012	13:50	Soil	Grab	FS	Encore	TCL VOCs
S-044-0207-001	S-044	Dump Area C	2 - 7	3/12/2012	13:58	Soil	Grab	FS	Encore	TCL VOCs
S-045-0207-001	S-045	Dump Area C	2 - 7	3/12/2012	14:04	Soil	Grab	FS	Encore	TCL VOCs
S-046-0208-001	S-046	Dump Area C	2 - 8	3/12/2012	14:12	Soil	Grab	FS	Encore	TCL VOCs
S-047-0207-001	S-047	Dump Area C	2 - 7	3/12/2012	14:20	Soil	Grab	FS	Encore	TCL VOCs
S-048-0207-001	S-048	Dump Area C	2 - 7	3/12/2012	14:27	Soil	Grab	FS	Encore	TCL VOCs
S-049-0207-001	S-049	Dump Area C	2 - 7	3/12/2012	14:35	Soil	Grab	FS	Encore	TCL VOCs
S-050-0209-001	S-050	Dump Area C	2 - 9	3/12/2012	14:42	Soil	Grab	FS	Encore	TCL VOCs
S-051-0206-001	S-051	Dump Area C	2 - 6	3/12/2012	14:50	Soil	Grab	FS	Encore	TCL VOCs
S-052-0210-001	S-052	Dump Area C	2 - 10	3/12/2012	14:58	Soil	Grab	FS	Encore	TCL VOCs
S-053-0210-001	S-053	Dump Area C	2 - 10	3/12/2012	15:07	Soil	Grab	FS	Encore	TCL VOCs
S-054-0210-001	S-054	Dump Area C	2 - 10	3/12/2012	15:15	Soil	Grab	FS	Encore	TCL VOCs
S-055-0209-001	S-055	Dump Area C	2 - 9	3/12/2012	15:23	Soil	Grab	FS	Encore	TCL VOCs
S-056-0206-001	S-056	Dump Area C	2 - 6	3/12/2012	15:30	Soil	Grab	FS	Encore	TCL VOCs
S-057-0207-001	S-057	Dump Area C	2 - 7	3/12/2012	15:42	Soil	Grab	FS	Encore	TCL VOCs
S-058-0209-001	S-058	Dump Area C	2 - 9	3/12/2012	15:58	Soil	Grab	FS	Encore	TCL VOCs
S-059-0207-001	S-059	Dump Area C	2 - 7	3/12/2012	16:14	Soil	Grab	FS	Encore	TCL VOCs
S-060-0206-001	S-060	Dump Area C	2 - 6	3/13/2012	12:55	Soil	Grab	MS/MSD	Encore	TCL VOCs
S-060-0206-002	S-060	Dump Area C	2 - 6	3/13/2012	12:58	Soil	Grab	FD	Encore	TCL VOCs
S-061-0210-001	S-061	Dump Area C	2 - 10	3/13/2012	14:15	Soil	Grab	FS	Encore	TCL VOCs
S-062-0212-001	S-062	Dump Area C	2 - 12	3/13/2012	12:10	Soil	Grab	FS	Encore	TCL VOCs
S-063-0212-001	S-063	Dump Area C	2 - 12	3/13/2012	12:28	Soil	Grab	FS	Encore	TCL VOCs
S-064-0210-001	S-064	Dump Area C	2 - 10	3/13/2012	13:42	Soil	Grab	FS	Encore	TCL VOCs
S-065-0208-001	S-065	Dump Area C	2 - 8	3/13/2012	13:50	Soil	Grab	FS	Encore	TCL VOCs
S-066-0206-001	S-066	Dump Area C	2 - 6	3/13/2012	11:35	Soil	Grab	FS	Encore	TCL VOCs

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S-068-0208-001	S-068	Dump Area C	2 - 8	3/13/2012	11:48	Soil	Grab	FS	Encore	TCL VOCs
S-069-0212-001	S-069	Dump Area C	2 - 12	3/13/2012	12:40	Soil	Grab	FS	Encore	TCL VOCs
S-070-0206-001	S-070	Dump Area C	2 - 6	3/13/2012	14:35	Soil	Grab	FS	Encore	TCL VOCs
S-071-0210-001	S-071	Dump Area C	2 - 10	3/13/2012	14:30	Soil	Grab	FS	Encore	TCL VOCs
S-072-0208-001	S-072	Dump Area C	2 - 8	3/13/2012	13:10	Soil	Grab	FS	Encore	TCL VOCs
S-073-0104-001	S-073	Dump Area C	1 - 4	3/13/2012	12:30	Soil	Grab	FS	Encore	TCL VOCs
S-074-0408-001	S-074	Dump Area C	4 - 8	3/13/2012	12:20	Soil	Grab	FS	Encore	TCL VOCs
S-075-0210-001	S-075	Dump Area C	2 - 10	3/13/2012	13:20	Soil	Grab	FS	Encore	TCL VOCs
S-076-0208-001	S-076	Dump Area C	2 - 8	3/13/2012	13:29	Soil	Grab	FS	Encore	TCL VOCs
S-077-0207-001	S-077	Dump Area C	2 - 7	3/13/2012	13:35	Soil	Grab	FS	Encore	TCL VOCs
S-078-0208-001	S-078	Dump Area C	2 - 8	3/13/2012	12:00	Soil	Grab	FS	Encore	TCL VOCs
S-079-0207-001	S-079	Dump Area C	2 - 7	3/14/2012	11:50	Soil	Grab	MS/MSD	Encore	TCL VOCs
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S-081-0208-001	S-081	Dump Area C	2 - 8	3/14/2012	10:47	Soil	Grab	FS	Encore	TCL VOCs
S-082-0212-001	S-082	Dump Area C	2 - 12	3/14/2012	9:20	Soil	Grab	FS	Encore	TCL VOCs
S-083-0210-001	S-083	Dump Area C	2 - 10	3/14/2012	12:08	Soil	Grab	FS	Encore	TCL VOCs
S-084-0211-001	S-084	Dump Area C	2 - 11	3/14/2012	10:33	Soil	Grab	FS	Encore	TCL VOCs
S-085-0206-001	S-085	Dump Area C	2 - 6	3/14/2012	10:25	Soil	Grab	FS	Encore	TCL VOCs
S-086-0408-001	S-086	Dump Area C	4 - 8	3/14/2012	10:10	Soil	Grab	FS	Encore	TCL VOCs
S-087-0207-001	S-087	Dump Area C	2 - 7	3/14/2012	10:00	Soil	Grab	FS	Encore	TCL VOCs
S-088-0208-001	S-088	Dump Area C	2 - 8	3/14/2012	11:28	Soil	Grab	FS	Encore	TCL VOCs
S-089-0206-001	S-089	Dump Area C	2 - 6	3/14/2012	9:05	Soil	Grab	FS	Encore	TCL VOCs
S-090-0212-001	S-090	Dump Area C	2 - 12	3/14/2012	10:20	Soil	Grab	FS	Encore	TCL VOCs
S-091-0207-001	S-091	Dump Area C	2 - 7	3/14/2012	11:16	Soil	Grab	FS	Encore	TCL VOCs
S-092-0212-001	S-092	Dump Area C	2 - 12	3/14/2012	11:00	Soil	Grab	FS	Encore	TCL VOCs
S-093-0210-001	S-093	Dump Area C	2 - 10	3/14/2012	10:38	Soil	Grab	FS	Encore	TCL VOCs

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S-095-0208-001	S-095	Dump Area C	2 - 8	3/14/2012	10:47	Soil	Grab	FS	Encore	TCL VOCs
S-096-1220-001	S-096	Dump Area C	12 - 20	3/14/2012	11:10	Soil	Grab	FS	Encore	TCL VOCs
S-166-0103-001	S-166	Dump Area E Perimeter	1 - 3	3/29/2012	12:45	Soil	Grab	MS/MSD	Encore	TCL VOCs
S-166-0103-002	S-166	Dump Area E Perimeter	1 - 3	3/29/2012	12:45	Soil	Grab	FD	Encore	TCL VOCs
S-167-0103-001	S-167	Dump Area E Perimeter	1 - 3	3/29/2012	12:55	Soil	Grab	FS	Encore	TCL VOCs
S-168-0103-001	S-168	Dump Area E Perimeter	1 - 3	3/29/2012	13:00	Soil	Grab	FS	Encore	TCL VOCs
S-169-0103-001	S-169	Dump Area E Perimeter	1 - 3	3/29/2012	13:05	Soil	Grab	FS	Encore	TCL VOCs
S-170-0103-001	S-170	Dump Area E Perimeter	1 - 3	3/29/2012	13:10	Soil	Grab	FS	Encore	TCL VOCs
S-171-0103-001	S-171	Dump Area E Perimeter	1 - 3	3/29/2012	13:15	Soil	Grab	FS	Encore	TCL VOCs
S-172-0103-001	S-172	Dump Area E Perimeter	1 - 3	3/29/2012	13:20	Soil	Grab	FS	Encore	TCL VOCs
S-173-0103-001	S-173	Dump Area E Perimeter	1 - 3	3/29/2012	13:25	Soil	Grab	FS	Encore	TCL VOCs
S-174-0103-001	S-174	Dump Area E Perimeter	1 - 3	3/29/2012	13:30	Soil	Grab	FS	Encore	TCL VOCs
S-175-0103-001	S-175	Dump Area E Perimeter	1 - 3	3/29/2012	12:55	Soil	Grab	FS	Encore	TCL VOCs
S-176-0103-001	S-176	Dump Area E Perimeter	1 - 3	3/29/2012	13:00	Soil	Grab	FS	Encore	TCL VOCs
S-177-0103-001	S-177	Dump Area E Perimeter	1 - 3	3/29/2012	13:05	Soil	Grab	FS	Encore	TCL VOCs
S-178-0103-001	S-178	Dump Area E Perimeter	1 - 3	3/29/2012	13:10	Soil	Grab	FS	Encore	TCL VOCs
S-179-0103-001	S-179	Dump Area E Perimeter	1 - 3	3/29/2012	13:15	Soil	Grab	FS	Encore	TCL VOCs
S-180-0103-001	S-180	Dump Area E Perimeter	1 - 3	3/29/2012	13:20	Soil	Grab	FS	Encore	TCL VOCs
S-181-0103-001	S-181	Dump Area E Perimeter	1 - 3	3/29/2012	13:25	Soil	Grab	FS	Encore	TCL VOCs
S-182-0103-001	S-182	Dump Area E Perimeter	1 - 3	3/29/2012	13:30	Soil	Grab	FS	Encore	TCL VOCs
S-183-0103-001	S-183	Dump Area E Perimeter	1 - 3	3/29/2012	13:35	Soil	Grab	FS	Encore	TCL VOCs
S-184-0103-001	S-184	Dump Area E Perimeter	1 - 3	3/29/2012	13:40	Soil	Grab	FS	Encore	TCL VOCs

Notes:

FS = Field Sample

MS/MSD = Matrix Spike/Matrix Spike Duplicate

TCL = Target Compound List

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FD = Field Duplicate

VOC = Volatile Organic Compounds

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S-044-0207-001	S-044	Dump Area C	2 - 7	3/12/2012	13:58	Soil	Grab	FS	Encore	TCL VOCs
S-045-0207-001	S-045	Dump Area C	2 - 7	3/12/2012	14:04	Soil	Grab	FS	Encore	TCL VOCs
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S-048-0207-001	S-048	Dump Area C	2 - 7	3/12/2012	14:27	Soil	Grab	FS	Encore	TCL VOCs
S-049-0207-001	S-049	Dump Area C	2 - 7	3/12/2012	14:35	Soil	Grab	FS	Encore	TCL VOCs
S-050-0209-001	S-050	Dump Area C	2 - 9	3/12/2012	14:42	Soil	Grab	FS	Encore	TCL VOCs
S-051-0206-001	S-051	Dump Area C	2 - 6	3/12/2012	14:50	Soil	Grab	FS	Encore	TCL VOCs
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S-056-0206-001	S-056	Dump Area C	2 - 6	3/12/2012	15:30	Soil	Grab	FS	Encore	TCL VOCs
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S-065-0208-001	S-065	Dump Area C	2 - 8	3/13/2012	13:50	Soil	Grab	FS	Encore	TCL VOCs
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S-089-0206-001	S-089	Dump Area C	2 - 6	3/14/2012	9:05	Soil	Grab	FS	Encore	TCL VOCs
S-090-0212-001	S-090	Dump Area C	2 - 12	3/14/2012	10:20	Soil	Grab	FS	Encore	TCL VOCs
S-091-0207-001	S-091	Dump Area C	2 - 7	3/14/2012	11:16	Soil	Grab	FS	Encore	TCL VOCs
S-092-0212-001	S-092	Dump Area C	2 - 12	3/14/2012	11:00	Soil	Grab	FS	Encore	TCL VOCs
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S-169-0103-001	S-169	Dump Area E Perimeter	1 - 3	3/29/2012	13:05	Soil	Grab	FS	Encore	TCL VOCs
S-170-0103-001	S-170	Dump Area E Perimeter	1 - 3	3/29/2012	13:10	Soil	Grab	FS	Encore	TCL VOCs
S-171-0103-001	S-171	Dump Area E Perimeter	1 - 3	3/29/2012	13:15	Soil	Grab	FS	Encore	TCL VOCs
S-172-0103-001	S-172	Dump Area E Perimeter	1 - 3	3/29/2012	13:20	Soil	Grab	FS	Encore	TCL VOCs
S-173-0103-001	S-173	Dump Area E Perimeter	1 - 3	3/29/2012	13:25	Soil	Grab	FS	Encore	TCL VOCs
S-174-0103-001	S-174	Dump Area E Perimeter	1 - 3	3/29/2012	13:30	Soil	Grab	FS	Encore	TCL VOCs
S-175-0103-001	S-175	Dump Area E Perimeter	1 - 3	3/29/2012	12:55	Soil	Grab	FS	Encore	TCL VOCs
S-176-0103-001	S-176	Dump Area E Perimeter	1 - 3	3/29/2012	13:00	Soil	Grab	FS	Encore	TCL VOCs
S-177-0103-001	S-177	Dump Area E Perimeter	1 - 3	3/29/2012	13:05	Soil	Grab	FS	Encore	TCL VOCs
S-178-0103-001	S-178	Dump Area E Perimeter	1 - 3	3/29/2012	13:10	Soil	Grab	FS	Encore	TCL VOCs
S-179-0103-001	S-179	Dump Area E Perimeter	1 - 3	3/29/2012	13:15	Soil	Grab	FS	Encore	TCL VOCs
S-180-0103-001	S-180	Dump Area E Perimeter	1 - 3	3/29/2012	13:20	Soil	Grab	FS	Encore	TCL VOCs
S-181-0103-001	S-181	Dump Area E Perimeter	1 - 3	3/29/2012	13:25	Soil	Grab	FS	Encore	TCL VOCs
S-182-0103-001	S-182	Dump Area E Perimeter	1 - 3	3/29/2012	13:30	Soil	Grab	FS	Encore	TCL VOCs
S-183-0103-001	S-183	Dump Area E Perimeter	1 - 3	3/29/2012	13:35	Soil	Grab	FS	Encore	TCL VOCs
S-184-0103-001	S-184	Dump Area E Perimeter	1 - 3	3/29/2012	13:40	Soil	Grab	FS	Encore	TCL VOCs

Notes:

FS = Field Sample

FD = Field Duplicate

MS/MSD = Matric Spike/Matric Spike Duplicate

TCL = Target Compound List

VOC = Volatile Organic Compounds

Table 1b.
Post-Confirmation Sample Collection Summary
Mansfield Trail Dump Site
March 13 to 28, 2012

Sample ID	Sample Location	Sample Area	Depth (ft)	Sample Date	Sample Time	Matrix	Collection	Sample Type	Container Type	Analysis
S-097-5253-001	S-097	Dump Area A/Lower Trench	52 - 53	3/15/2012	12:30	Soil	Grab	FS	Encore	TCL VOCs
S-098-5051-001	S-098	Dump Area A/Lower Trench	50 - 51	3/15/2012	12:19	Soil	Grab	FS	Encore	TCL VOCs
S-099-5051-001	S-099	Dump Area A/Lower Trench	50 - 51	3/15/2012	12:12	Soil	Grab	FS	Encore	TCL VOCs
S-100-5051-001	S-100	Dump Area A/Lower Trench	50 - 51	3/15/2012	11:29	Soil	Grab	FS	Encore	TCL VOCs
S-101-5253-001	S-101	Dump Area A/Lower Trench	52 - 53	3/15/2012	12:00	Soil	Grab	FS	Encore	TCL VOCs
S-102-2627-001	S-102	Dump Area A/Lower Trench	26 - 27	3/15/2012	12:41	Soil	Grab	FS	Encore	TCL VOCs
S-103-1213-001	S-103	Dump Area A/Lower Trench	12 - 13	3/15/2012	11:10	Soil	Grab	FS	Encore	TCL VOCs
S-104-1213-001	S-104	Dump Area A/Lower Trench	12 - 13	3/15/2012	11:35	Soil	Grab	MS/MSD	Encore	TCL VOCs
S-104-1213-002	S-104	Dump Area A/Lower Trench	12 - 13	3/15/2012	11:35	Soil	Grab	FD	Encore	TCL VOCs
S-105-0607-001	S-105	Dump Area A/Lower Trench	6 - 7	3/15/2012	11:53	Soil	Grab	FS	Encore	TCL VOCs
S-106-2425-001	S-106	Dump Area A/Lower Trench	24 - 25	3/15/2012	12:06	Soil	Grab	FS	Encore	TCL VOCs
S-107-1617-001	S-107	Dump Area A/Lower Trench	16 - 17	3/15/2012	12:26	Soil	Grab	FS	Encore	TCL VOCs
S-108-0607-001	S-108	Dump Area A/Lower Trench	6 - 7	3/15/2012	12:30	Soil	Grab	FS	Encore	TCL VOCs
S-109-2425-001	S-109	Dump Area A/Upper Trench	24 - 25	3/15/2012	10:50	Soil	Grab	FS	Encore	TCL VOCs
S-110-2627-001	S-110	Dump Area A/Upper Trench	26 - 27	3/15/2012	11:01	Soil	Grab	FS	Encore	TCL VOCs
S-111-2930-001	S-111	Dump Area A/Upper Trench	29 - 30	3/15/2012	11:05	Soil	Grab	FS	Encore	TCL VOCs
S-112-1617-001	S-112	Dump Area A/Upper Trench	16 - 17	3/15/2012	10:45	Soil	Grab	FS	Encore	TCL VOCs
S-113-1415-001	S-113	Dump Area A/Upper Trench	14 - 15	3/15/2012	10:30	Soil	Grab	FS	Encore	TCL VOCs
S-114-2425-001	S-114	Dump Area A/Upper Trench	24 - 25	3/15/2012	11:10	Soil	Grab	FS	Encore	TCL VOCs
S-115-3637-001	S-115	Dump Area A/Upper Trench	36 - 37	3/15/2012	11:17	Soil	Grab	FS	Encore	TCL VOCs
S-116-0102-001	S-116	Dump Area A/Upper Trench	1 - 2	3/16/2012	9:26	Soil	Grab	MS/MSD	Encore	TCL VOCs
S-116-0102-002	S-116	Dump Area A/Upper Trench	1 - 2	3/16/2012	9:26	Soil	Grab	FD	Encore	TCL VOCs
S-117-0203-001	S-117	Dump Area A/Upper Trench	2 - 3	3/16/2012	9:15	Soil	Grab	FS	Encore	TCL VOCs
S-118-0203-001	S-118	Dump Area A/Upper Trench	2 - 3	3/16/2012	9:32	Soil	Grab	FS	Encore	TCL VOCs
S-119-0203-001	S-119	Dump Area A/Upper Trench	2 - 3	3/16/2012	9:38	Soil	Grab	FS	Encore	TCL VOCs
S-120-0203-001	S-120	Dump Area A/Upper Trench	2 - 3	3/16/2012	9:45	Soil	Grab	FS	Encore	TCL VOCs

Table 1b.
Post-Confirmation Sample Collection Summary
Mansfield Trail Dump Site
March 13 to 28, 2012

Sample ID	Sample Location	Sample Area	Depth (ft)	Sample Date	Sample Time	Matrix	Collection	Sample Type	Container Type	Analysis
S-121-0203-001	S-121	Dump Area A/Upper Trench	2 - 3	3/16/2012	9:44	Soil	Grab	FS	Encore	TCL VOCs
S-122-0203-001	S-122	Dump Area A/Upper Trench	2 - 3	3/16/2012	9:50	Soil	Grab	FS	Encore	TCL VOCs
S-123-0203-001	S-123	Dump Area A/Upper Trench	2 - 3	3/16/2012	9:55	Soil	Grab	FS	Encore	TCL VOCs
S-124-0203-001	S-124	Dump Area A/Upper Trench	2 - 3	3/16/2012	10:00	Soil	Grab	FS	Encore	TCL VOCs
S-125-0203-001	S-125	Dump Area A/Upper Trench	2 - 3	3/16/2012	10:06	Soil	Grab	FS	Encore	TCL VOCs
S-126-0203-001	S-126	Dump Area A/Upper Trench	2 - 3	3/16/2012	10:10	Soil	Grab	FS	Encore	TCL VOCs
S-127-0203-001	S-127	Dump Area A/Upper Trench	2 - 3	3/16/2012	10:15	Soil	Grab	FS	Encore	TCL VOCs
S-128-0203-001	S-128	Dump Area A/Upper Trench	2 - 3	3/16/2012	10:22	Soil	Grab	FS	Encore	TCL VOCs
S-129-3033-001	S-129	Dump Area A/Upper Trench	30 - 33	3/16/2012	10:30	Soil	Grab	FS	Encore	TCL VOCs
S-130-3637-001	S-130	Dump Area A/Upper Trench	36 - 37	3/16/2012	10:37	Soil	Grab	FS	Encore	TCL VOCs
S-131-2223-001	S-131	Dump Area A/Upper Trench	22 - 23	3/16/2012	10:45	Soil	Grab	FS	Encore	TCL VOCs
S-132-4041-001	S-132	Dump Area A/Upper Trench	40 - 41	3/16/2012	10:50	Soil	Grab	FS	Encore	TCL VOCs
S-133-1213-001	S-133	Dump Area A/Upper Trench	12 - 13	3/16/2012	10:54	Soil	Grab	FS	Encore	TCL VOCs
S-134-0809-001	S-134	Dump Area A/Upper Trench	8 - 9	3/16/2012	11:00	Soil	Grab	FS	Encore	TCL VOCs
S-135-0203-001	S-135	Dump Area A/Upper Trench	2 - 3	3/16/2012	11:15	Soil	Grab	FS	Encore	TCL VOCs
S-136-0103-001	S-136	Dump Area B	1 - 3	3/27/2012	10:15	Soil	Grab	MS/MSD	Encore	TCL VOCs
S-136-0103-002	S-136	Dump Area B	1 - 3	3/27/2012	10:15	Soil	Grab	FD	Encore	TCL VOCs
S-137-0103-001	S-137	Dump Area B	1 - 3	3/27/2012	10:20	Soil	Grab	FS	Encore	TCL VOCs
S-138-0103-001	S-138	Dump Area B	1 - 3	3/27/2012	10:25	Soil	Grab	FS	Encore	TCL VOCs
S-139-0103-001	S-139	Dump Area B	1 - 3	3/27/2012	10:30	Soil	Grab	FS	Encore	TCL VOCs
S-140-0103-001	S-140	Dump Area B	1 - 3	3/27/2012	10:35	Soil	Grab	FS	Encore	TCL VOCs
S-141-0103-001	S-141	Dump Area B	1 - 3	3/27/2012	10:40	Soil	Grab	FS	Encore	TCL VOCs
S-142-0103-001	S-142	Dump Area B	1 - 3	3/27/2012	10:45	Soil	Grab	FS	Encore	TCL VOCs
S-143-0103-001	S-143	Dump Area B	1 - 3	3/27/2012	10:50	Soil	Grab	FS	Encore	TCL VOCs
S-144-0103-001	S-144	Dump Area B	1 - 3	3/27/2012	10:55	Soil	Grab	FS	Encore	TCL VOCs
S-145-0103-001	S-145	Dump Area B	1 - 3	3/27/2012	11:00	Soil	Grab	FS	Encore	TCL VOCs

Table 1b.
Post-Confirmation Sample Collection Summary
Mansfield Trail Dump Site
March 13 to 28, 2012

Sample ID	Sample Locatio	Sample Area	Depth (ft)	Sample Date	Sample Time	Matrix	Collectio	Sample Type	Container Type	Analysis
S-146-0103-001	S-146	Dump Area B	1 - 3	3/27/2012	10:10	Soil	Grab	FS	Encore	TCL VOCs
S-147-0103-001	S-147	Dump Area B	1 - 3	3/27/2012	10:15	Soil	Grab	FS	Encore	TCL VOCs
S-148-0103-001	S-148	Dump Area B	1 - 3	3/27/2012	10:20	Soil	Grab	FS	Encore	TCL VOCs
S-149-0103-001	S-149	Dump Area B	1 - 3	3/27/2012	10:25	Soil	Grab	FS	Encore	TCL VOCs
S-150-0103-001	S-150	Dump Area B	1 - 3	3/27/2012	10:30	Soil	Grab	FS	Encore	TCL VOCs
S-151-0103-001	S-151	Dump Area B	1 - 3	3/27/2012	10:35	Soil	Grab	FS	Encore	TCL VOCs
S-152-0103-001	S-152	Dump Area B	1 - 3	3/27/2012	10:40	Soil	Grab	FS	Encore	TCL VOCs
S-153-0103-001	S-153	Dump Area B	1 - 3	3/27/2012	10:45	Soil	Grab	FS	Encore	TCL VOCs
S-154-0103-001	S-154	Dump Area B	1 - 3	3/27/2012	10:50	Soil	Grab	FS	Encore	TCL VOCs
S-155-0103-001	S-155	Dump Area B	1 - 3	3/27/2012	10:55	Soil	Grab	FS	Encore	TCL VOCs
S-156-0103-001	S-156	Dump Area D Trench 4	1 - 3	3/28/2012	14:00	Soil	Grab	FD	Encore	TCL VOCs
S-157-2425-001	S-157	Dump Area D Trench 4	24 - 25	3/28/2012	14:10	Soil	Grab	MS/MSD	Encore	TCL VOCs
S-157-2425-002	S-157	Dump Area D Trench 4	24 - 25	3/28/2012	14:00	Soil	Grab	FD	Encore	TCL VOCs
S-158-2425-001	S-158	Dump Area D Trench 4	24 - 25	3/28/2012	14:15	Soil	Grab	FS	Encore	TCL VOCs
S-159-2425-001	S-159	Dump Area D Trench 4	24 - 25	3/28/2012	14:20	Soil	Grab	FS	Encore	TCL VOCs
S-160-2425-001	S-160	Dump Area D Trench 4	24 - 25	3/28/2012	14:25	Soil	Grab	FS	Encore	TCL VOCs
S-161-1617-001	S-161	Dump Area D Trench 4	16 - 17	3/28/2012	14:30	Soil	Grab	FS	Encore	TCL VOCs
S-162-3637-001	S-162	Dump Area D Trench 4	36 - 37	3/28/2012	14:25	Soil	Grab	FS	Encore	TCL VOCs
S-163-3637-001	S-163	Dump Area D Trench 4	36 - 37	3/28/2012	14:20	Soil	Grab	FS	Encore	TCL VOCs
S-164-3637-001	S-164	Dump Area D Trench 4	36 - 37	3/28/2012	14:15	Soil	Grab	FS	Encore	TCL VOCs
S-165-3637-001	S-165	Dump Area D Trench 4	36 - 37	3/28/2012	14:10	Soil	Grab	FS	Encore	TCL VOCs

Notes:

FS = Field Sample

FD = Field Duplicate

MS/MSD = Matric Spike/Matric Spike Duplicate

TCL = Target Compound List

VOC = Volatile Organic Compounds

Table 1c.
Waste Characterization Collection Summary
Mansfield Trail Dump Site
February 22 to April 12, 2012

Sample ID	Sample Location		Depth (ft)	Sample Date	Sample Time	Matrix	Collection	Sample Type	Container Type*	Analysis*
	Dump Area	Trench								
S-001-0024-001	C	1	0 - 24	2/22/2012	14:10	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-001-0024-002	C	1	0 - 24	2/22/2012	14:10	Soil	Composite	FD	3 Glass Jars	Waste Characterization
S-002-0030-001	C	1A	0 - 30	2/22/2012	14:35	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-003-0024-001	B	1B	0 - 24	2/22/2012	15:00	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-004-0018-001	B	1C	0 - 18	2/22/2012	15:20	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-005-0024-001	B	1D	0 - 24	2/22/2012	15:30	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-006-0024-001	E	3A	0 - 24	2/23/2012	10:48	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-007-0014-001	E	3B	0 - 14	2/23/2012	11:04	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-008-0033-001	E	2D	0 - 33	2/23/2012	11:24	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-009-0036-001	E	2C	0 - 36	2/23/2012	11:53	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-010-0029-001	E	3B	0 - 29	2/23/2012	13:28	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-011-0036-001	E	2A	0 - 36	2/23/2012	13:50	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-012-0041-001	E	1C	0 - 41	2/23/2012	14:10	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-013-0035-001	E	1B	0 - 35	2/23/2012	14:35	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-014-0030-001	E	1A	0 - 30	2/23/2012	15:12	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-015-0024-001	A	LOWER D	0 - 24	2/24/2012	12:48	Soil	Composite	FS	3 Glass Jars	Waste Characterization

Table 1c.
Waste Characterization Collection Summary
Mansfield Trail Dump Site
February 22 to April 12, 2012

Sample ID	Sample Location		Depth (ft)	Sample Date	Sample Time	Matrix	Collection	Sample Type	Container Type*	Analysis*
	Dump Area	Trench								
S-016-0023-001	A	LOWER C	0 - 23	2/24/2012	13:04	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-017-0022-001	A	LOWER B	0 - 22	2/24/2012	13:19	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-018-0013-001	A	LOWER A	0 - 13	2/24/2012	13:31	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-019-0012-001	A	UPPER C	0 - 12	2/24/2012	13:48	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-020-0017-001	A	UPPER B	0 - 17	2/24/2012	14:02	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-021-0018-001	A	UPPER A	0 - 18	2/24/2012	14:15	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-022-0018-001	D	North Trench 1	0 - 18	3/2/2012	9:11	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-023-0038-001	D	North Trench 1	0 - 38	3/2/2012	9:21	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-024-0028-001	D	North Trench 1	0 - 28	3/2/2012	9:45	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-025-0026-001	D	Center Trench 1	0 - 26	3/2/2012	9:58	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-026-0022-001	D	Center Trench 1	0 - 22	3/2/2012	10:10	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-027-0024-001	D	Center Trench 1	0 - 24	3/2/2012	10:20	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-028-0034-001	D	South Trench 1	0 - 34	3/2/2012	10:32	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-029-0022-001	D	South Trench 1	0 - 22	3/2/2012	10:42	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-030-0027-001	D	South Trench 1	0 - 27	3/2/2012	11:03	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-031-0024-001	D	South Trench 2	0 - 24	3/2/2012	12:55	Soil	Composite	FS	3 Glass Jars	Waste Characterization

Table 1c.
Waste Characterization Collection Summary
Mansfield Trail Dump Site
February 22 to April 12, 2012

Sample ID	Sample Location		Depth (ft)	Sample Date	Sample Time	Matrix	Collection	Sample Type	Container Type*	Analysis*
	Dump Area	Trench								
S-031-0024-002	D	South Trench 2	0 - 24	3/2/2012	12:55	Soil	Composite	FD	3 Glass Jars	Waste Characterization
S-032-0023-001	D	South Trench 2	0 - 23	3/2/2012	13:11	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-S033-0021-001	D	South Trench 2	0 - 21	3/2/2012	13:23	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-034-0018-001	D	North Trench 2	0 - 18	3/2/2012	14:05	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-035-0026-001	D	North Trench 2	0 - 26	3/2/2012	14:20	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-036-0022-001	D	North Trench 2	0 - 22	3/2/2012	14:32	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-037-0025-001	D	North Trench 2	0 - 25	3/2/2012	14:40	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-038-0022-001	D	North Trench 3	0 - 22	3/2/2012	15:05	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-039-0030-001	D	Center Trench 3	0 - 30	3/2/2012	15:15	Soil	Composite	FS	3 Glass Jars	Waste Characterization
S-040-0015-001	D	South Trench 3	0 - 15	3/2/2012	15:12	Soil	Composite	FS	3 Glass Jars	Waste Characterization
MTD-041212-AreaD-01	D	Center Trench 2	10 - 15	4/12/2012	12:35	Soil	Grab	FS	3 Glass Jars	Waste Characterization
MTD-041212-AreaD-02	D	Center Trench 2	10 - 15	4/12/2012	12:30	Soil	Grab	FS	3 Glass Jars	Waste Characterization

Notes:

FS = Field Sample

FD = Field Duplicate

MS/MSD = Matric Spike/Matric Spike Duplicate

Waste Characterization Analysis: Full TCLP (RCRA 8 metals, VOC, SVOC, Herbicides, Pesticides), Total (VOC, SVOC, RCRA 8 metals)

Corrosivity, pH, Ignitability, Reactive Cyanide and Sulfide, TPH GRP and TPH DRO

TCL = Target Compound List

VOC = Volatile Organic Compounds

Container Type: 3 Glass Jars (2 oz, 4 oz and 8 oz)

Table 2.
Dump Area C
Analytical Summary
TCL VOC Analysis - Mansfield Trail Dump
March 12 to 14, 2012

Sample Number:	S-041-0210-001	S-041-0210-002	S-042-0207-001	S-043-0212-001	S-044-0207-001	S-045-0207-001	S-046-0208-001	S-047-0207-001
Sampling Location:	S-041	S-041	S-042	S-043	S-044	S-045	S-046	S-047
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Date Sampled:	3/12/2012	3/12/2012	3/12/2012	3/12/2012	3/12/2012	3/12/2012	3/12/2012	3/12/2012
Parameter	Result	RL	Result	RL	Result	RL	Result	RL
Dichlorodifluoromethane	ND	21	ND	21	ND	34	ND	19
Chloromethane	ND	21	ND	21	ND	34	ND	19
Vinyl Chloride	10500	ND	21	ND	21	ND	34	ND
Bromomethane	1000	ND	J	83	ND	J	82	ND
Chloroethane	ND	21	ND	21	ND	34	ND	19
Trichlorofluoromethane	ND	21	ND	21	ND	34	ND	19
1,1-Dichloroethene	ND	21	ND	21	ND	34	ND	19
1,1,2-Trichloro-1,2,2-Trifluoroethane	1000	ND	21	ND	21	ND	34	ND
Carbon Disulfide	ND	21	ND	21	ND	34	ND	19
Acetone	100000	100	41	120	41	1000	68	200
Methyl Acetate	ND	J	41	ND	J	41	ND	J
Methylene Chloride	ND	21	ND	21	ND	34	ND	19
trans-1,2-Dichloroethene	ND	21	ND	21	ND	34	ND	19
Methyl tert-Butyl Ether	ND	21	ND	21	ND	34	ND	19
1,1-Dichloroethane	ND	21	ND	21	ND	34	ND	19
cis-1,2-Dichloroethene	ND	21	ND	21	ND	34	ND	19
2-Butanone	50000	ND	41	ND	41	ND	68	ND
Bromodichloromethane	ND	21	ND	21	ND	34	ND	19
Chloroform	1000	ND	21	ND	21	ND	34	ND
1,1,1-Trichloroethane	50000	ND	21	ND	21	ND	34	ND
Cyclohexane	ND	21	ND	21	ND	34	ND	19
Carbon Tetrachloride	1000	ND	21	ND	21	ND	34	ND
Benzene	1000	ND	21	ND	21	ND	34	ND
1,2-Dichloroethane	1000	ND	21	ND	21	ND	34	ND
Trichloroethene	1000	ND	21	ND	21	ND	34	ND
1,2-Dichloropropane	ND	21	ND	21	ND	34	ND	19
Bromodichloromethane	ND	21	ND	21	ND	34	ND	19
cis-1,3-Dichloropropene	ND	21	ND	21	ND	34	ND	19
4-Methyl-2-Pentanone	ND	J	41	ND	J	41	ND	J
Toluene	500000	ND	J	21	ND	J	21	ND
trans-1,3-Dichloropropene	ND	21	ND	21	ND	34	ND	19
1,1,2-Trichloroethane	1000	ND	21	ND	21	ND	34	ND
Tetrachloroethene	ND	J	21	ND	J	21	ND	J
Methylcyclohexane	ND	21	ND	21	ND	34	ND	19
Dibromochloromethane	ND	21	ND	21	ND	34	ND	19
1,2-Dibromoethane	ND	J	21	ND	J	21	ND	J
2-Hexanone	ND	J	41	ND	J	41	ND	J
Chlorobenzene	1000	ND	J	21	ND	J	21	ND
Ethylbenzene	ND	J	21	ND	J	21	ND	J
m/p-Xylene	ND	J	21	ND	J	21	ND	J
o-Xylene	ND	J	21	ND	J	21	ND	J
Styrene	ND	J	21	ND	J	21	ND	J
Bromoform	1000	ND	L	21	ND	L	21	ND
Isopropylbenzene	ND	J	21	ND	J	21	ND	J
1,1,2,2-Tetrachloroethane	1000	ND	J	21	ND	J	21	ND
1,3-Dichlorobenzene	100000	ND	J	21	ND	J	21	ND
1,4-Dichlorobenzene	100000	ND	J	21	ND	J	21	ND
1,2-Dichlorobenzene	50000	ND	J	21	ND	J	21	ND
1,2-Dibromo-3-Chloropropane	ND	J	21	ND	J	21	ND	J
1,2,4-Trichlorobenzene	100000	ND	J	21	ND	J	21	ND
1,2,3-Trichlorobenzene	ND	J	21	ND	J	21	ND	J

Notes:
 RL = Reporting Limit
 TCL = Target Compound List
 VOC = Volatile Organic Compounds
 ug/kg = micrograms per kilograms
 ND = Non detected value
 J = The reported value is an estimate.
 L = The reported value may be biased low.
 K = The reported value may be biased high.

Table 2.
Dump Area C
Analytical Summary
TCL VOC Analysis - Mansfield Trail Dump
March 12 to 14, 2012

Sample Number:	S-048-0207-001	S-049-0207-001	S-050-0209-001	S-051-0206-001	S-052-0210-001	S-053-0210-001	S-054-0210-001	S-055-0209-001
Sampling Location:	S-048	S-049	S-050	S-051	S-052	S-053	S-054	S-055
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Date Sampled:	3/12/2012	3/12/2012	3/12/2012	3/12/2012	3/12/2012	3/12/2012	3/12/2012	3/12/2012
Parameter	Result	RL	Result	RL	Result	RL	Result	RL
Dichlorodifluoromethane	ND	15	ND	4.9	ND	6.4	ND	5.2
Chloromethane	ND	15	ND	4.9	ND	6.4	ND	5.2
Vinyl Chloride	ND	15	ND	4.9	ND	6.4	ND	5.2
Bromomethane	ND	60	ND	20	ND	26	ND	83
Chloroethane	ND	15	ND	4.9	ND	6.4	ND	5.2
Trichlorofluoromethane	ND	15	ND	4.9	ND	6.4	ND	5.2
1,1-Dichloroethane	ND	15	ND	4.9	ND	6.4	ND	5.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	15	ND	4.9	ND	6.4	ND	5.2
Carbon Disulfide	ND	15	ND	4.9	ND	6.4	ND	5.2
Acetone	280	30	110	9.8	120	13	82	10
Methyl Acetate	ND	30	ND	9.8	ND	13	ND	10
Methylene Chloride	ND	15	ND	4.9	ND	6.4	ND	5.2
trans-1,2-Dichloroethene	ND	15	ND	4.9	ND	6.4	ND	5.2
Methyl tert-Butyl Ether	ND	15	ND	4.9	ND	6.4	ND	5.2
1,1-Dichloroethane	ND	15	ND	4.9	ND	6.4	ND	5.2
cis-1,2-Dichloroethane	ND	15	ND	4.9	ND	6.4	ND	5.2
2-Butanone	ND	30	13	9.8	ND	13	ND	10
Bromodichloromethane	ND	15	ND	4.9	ND	6.4	ND	5.2
Chloroform	ND	15	ND	4.9	ND	6.4	ND	5.2
1,1,1-Trichloroethane	ND	15	ND	4.9	ND	6.4	ND	5.2
Cyclohexane	ND	15	ND	4.9	ND	6.4	ND	5.2
Carbon Tetrachloride	ND	15	ND	4.9	ND	6.4	ND	5.2
Benzene	ND	15	ND	4.9	ND	6.4	ND	5.2
1,2-Dichloroethane	ND	15	ND	4.9	ND	6.4	ND	5.2
Trichloroethane	ND	15	ND	4.9	ND	6.4	ND	5.2
1,2-Dichloropropane	ND	15	ND	4.9	ND	6.4	ND	5.2
Bromodichloromethane	ND	15	ND	4.9	ND	6.4	ND	5.2
cis-1,3-Dichloropropene	ND	15	ND	4.9	ND	6.4	ND	10
4-Methyl-2-Pentanone	ND	30	ND	9.8	ND	13	ND	5.2
Toluene	ND	15	ND	4.9	ND	6.4	ND	5.2
trans-1,3-Dichloropropene	ND	15	ND	4.9	ND	6.4	ND	5.2
1,1,2-Trichloroethane	ND	15	ND	4.9	ND	6.4	ND	5.2
Tetrachloroethane	ND	15	ND	4.9	ND	6.4	ND	5.2
Methylcyclohexane	ND	15	ND	4.9	ND	6.4	ND	5.2
Dibromochloromethane	ND	15	ND	4.9	ND	6.4	ND	5.2
1,2-Dibromomethane	ND	15	ND	4.9	ND	6.4	ND	5.2
2-Hexanone	ND	30	ND	9.8	ND	6.4	ND	10
Chlorobenzene	ND	15	ND	4.9	ND	6.4	ND	5.2
Ethylbenzene	ND	15	ND	4.9	ND	6.4	ND	5.2
m/p-Xylene	ND	15	ND	4.9	ND	6.4	ND	5.2
o-Xylene	ND	15	ND	4.9	ND	6.4	ND	5.2
Styrene	ND	15	ND	4.9	ND	6.4	ND	5.2
Bromoform	ND	15	ND	4.9	ND	6.4	ND	5.2
Isopropylbenzene	ND	15	ND	4.9	ND	6.4	ND	5.2
1,1,2,2-Tetrachloroethane	ND	15	ND	4.9	ND	6.4	ND	5.2
1,3-Dichlorobenzene	ND	15	ND	4.9	ND	6.4	ND	5.2
1,4-Dichlorobenzene	ND	15	ND	4.9	ND	6.4	ND	5.2
1,2-Dichlorobenzene	ND	15	ND	4.9	ND	6.4	ND	5.2
1,2-Dibromo-3-Chloropropane	ND	15	ND	4.9	ND	6.4	ND	5.2
1,2,4-Trichlorobenzene	ND	15	ND	4.9	ND	6.4	ND	5.2
1,2,3-Trichlorobenzene	ND	15	ND	4.9	ND	6.4	ND	5.2

Notes:
 RL = Reporting Limit
 TCL = Target Compound List
 VOC = Volatile Organic Compounds
 ug/kg = micrograms per kilograms
 ND = Non detected value
 J = The reported value is an estimate.
 L = The reported value may be biased low.
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Table 2.
Dump Area C
Analytical Summary
TCL VOC Analysis - Mansfield Trail Dump
March 12 to 14, 2012

Sample Number:	S-056-0206-001	S-057-0207-001	S-058-0209-001	S-059-0207-001	S-060-0206-001	S-060-0206-002	S-061-0210-001	S-062-0212-001
Sampling Location:	S-056	S-057	S-058	S-059	S-060	S-060	S-061	S-062
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Date Sampled:	3/12/2012	3/12/2012	3/12/2012	3/12/2012	3/13/2012	3/13/2012	3/13/2012	3/13/2012
Parameter	Result	RL	Result	RL	Result	RL	Result	RL
Dichlorodifluoromethane	ND	19	ND	18	ND	9.3	ND	17
Chloromethane	ND	19	ND	18	ND	9.3	ND	17
Vinyl Chloride	ND	19	ND	18	ND	9.3	ND	17
Bromomethane	ND J	74	ND J	71	ND J	37	ND J	17
Chloroethane	ND	19	ND	18	ND	9.3	ND	17
Trichlorofluoromethane	ND	19	ND	18	ND	9.3	ND	17
1,1-Dichloroethane	ND	19	ND	18	ND	9.3	ND	17
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	19	ND	18	ND	9.3	ND	17
Carbon Disulfide	ND	19	ND	18	ND	9.3	ND	17
Acetone	410	37	428	36	238	19	250	35
Methyl Acetate	ND J	37	ND J	36	ND J	19	ND J	17
Methylene Chloride	ND	19	ND	18	ND	9.3	ND	17
trans-1,2-Dichloroethene	ND	19	ND	18	ND	9.3	ND	17
Methyl tert-Butyl Ether	ND	19	ND	18	ND	9.3	ND	17
1,1-Dichloroethane	ND	19	ND	18	ND	9.3	ND	17
cis-1,2-Dichloroethene	ND	19	ND	18	ND	9.3	ND	17
2-Butanone	44	37	ND	36	20	19	ND	35
Bromochloromethane	ND	19	ND	18	ND	9.3	ND	17
Chloroform	ND	19	ND	18	ND	9.3	ND	17
1,1,1-Trichloroethane	ND	19	ND	18	ND	9.3	ND	17
Cyclohexane	ND	19	ND	18	ND	9.3	ND	17
Carbon Tetrachloride	ND	19	ND	18	ND	9.3	ND	17
Benzene	ND	19	ND	18	ND	9.3	ND	17
1,2-Dichloroethane	ND	19	ND	18	ND	9.3	ND	17
Trichloroethene	ND	19	ND	18	ND	9.3	ND	17
1,2-Dichloropropane	ND	19	ND	18	ND	9.3	ND	17
Bromodichloromethane	ND	19	ND	18	ND	9.3	ND	17
cis-1,3-Dichloropropene	ND	19	ND	18	ND	9.3	ND	17
4-Methyl-2-Pentanone	ND J	37	ND J	18	ND	9.3	ND	17
Toluene	ND J	19	ND J	18	ND	19	ND	35
trans-1,3-Dichloropropene	ND	19	ND	18	ND	9.3	ND	17
1,1,2-Trichloroethane	ND	19	ND	18	ND	9.3	ND	17
Tetrachloroethene	ND J	19	ND J	18	ND	9.3	ND	17
Methylcyclohexane	ND	19	ND	18	ND	9.3	ND	17
Dibromochloromethane	ND	19	ND	18	ND	9.3	ND	17
1,2-Dibromoethane	ND J	19	ND J	18	ND	9.3	ND	17
2-Hexanone	ND J	37	ND J	36	ND L	19	ND	17
Chlorobenzene	ND J	19	ND J	18	ND	9.3	ND	17
Ethylbenzene	ND J	19	ND J	18	ND	9.3	ND	17
m/p-Xylene	ND J	19	ND J	18	ND	9.3	ND	17
o-Xylene	ND J	19	ND J	18	ND	9.3	ND	17
Styrene	ND J	19	ND J	18	ND	9.3	ND	17
Bromoform	ND	19	ND	18	ND	9.3	ND	17
Isopropylbenzene	ND J	19	ND J	18	ND	9.3	ND	17
1,1,2,2-Tetrachloroethane	ND J	19	ND J	18	ND	9.3	ND	17
1,3-Dichlorobenzene	ND J	19	ND J	18	ND	9.3	ND	17
1,4-Dichlorobenzene	ND J	19	ND J	18	ND	9.3	ND	17
1,2-Dichlorobenzene	ND J	19	ND J	18	ND	9.3	ND	17
1,2-Dibromo-3-Chloropropane	ND J	19	ND J	18	ND L	9.3	ND	17
1,2,4-Trichlorobenzene	ND J	19	ND J	18	ND L	9.3	ND	17
1,2,3-Trichlorobenzene	ND J	19	ND J	18	ND L	9.3	ND	17

Notes:
 RL = Reporting Limit
 TCL = Target Compound List
 VOC = Volatile Organic Compounds
 ug/kg = micrograms per kilograms
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 J = The reported value is an estimate.
 L = The reported value may be biased low.
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Table 2.
Dump Area C
Analytical Summary
TCL VOC Analysis - Mansfield Trail Dump
March 12 to 14, 2012

Sample Number:	S-063-0212-001	S-064-0210-001	S-065-0208-001	S-066-0206-001	S-067-0206-001	S-068-0208-001	S-069-0212-001	S-070-0206-001
Sampling Location:	S-063	S-064	S-065	S-066	S-067	S-068	S-069	S-070
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Date Sampled:	3/13/2012	3/13/2012	3/13/2012	3/13/2012	3/13/2012	3/13/2012	3/13/2012	3/13/2012
Parameter	Result	RL	Result	RL	Result	RL	Result	RL
Dichlorodifluoromethane	ND	28	ND	24	ND	23	ND	8.6
Chloromethane	ND	28	ND	24	ND	23	ND	8.6
Vinyl Chloride	10000	ND	28	ND	24	ND	90	ND
Bromomethane	1000	ND J	110	ND J	97	ND J	23	ND J
Chloroethane	ND	28	ND	24	ND	23	ND	8.6
Trichlorofluoromethane	ND	28	ND	24	ND	23	ND	8.6
1,1-Dichloroethene	ND	28	ND	24	ND	23	ND	8.6
1,1,2-Trichloro-1,2,2-Trifluoroethane	1000	ND	28	ND	24	ND	23	ND
Carbon Disulfide	ND	28	ND	24	ND	23	ND	8.6
Acetone	100000	60	56	86	48	81	45	78
Methyl Acetate	ND J	56	ND J	48	ND J	45	ND J	17
Methylene Chloride	ND	28	ND	24	ND	23	ND	8.6
trans-1,2-Dichloroethene	ND	28	ND	24	ND	23	ND	8.6
Methyl tert-Butyl Ether	ND	28	ND	24	ND	23	ND	8.6
1,1-Dichloroethane	ND	28	ND	24	ND	23	ND	8.6
cis-1,2-Dichloroethene	ND	28	ND	24	ND	23	ND	8.6
2-Butanone	50000	ND	56	ND	48	ND	45	ND
Bromodichloromethane	ND	28	ND	24	ND	23	ND	8.6
Chloroform	1000	ND	28	ND	24	ND	23	ND
1,1,1-Trichloroethane	50000	ND	28	ND	24	ND	23	ND
Cyclohexane	ND	28	ND	24	ND	23	ND	8.6
Carbon Tetrachloride	1000	ND	28	ND	24	ND	23	ND
Benzene	1000	ND	28	ND	24	ND	23	ND
1,2-Dichloroethane	1000	ND	28	ND	24	ND	23	ND
Trichloroethene	1000	ND	28	ND	24	ND	23	ND
1,2-Dichloropropane	ND	28	ND	24	ND	23	ND	8.6
Bromodichloromethane	ND	28	ND	24	ND	23	ND	8.6
cis-1,3-Dichloropropene	ND	28	ND	24	ND	23	ND	8.6
4-Methyl-2-Pentanone	ND J	56	ND	48	ND J	45	ND	17
Toluene	300000	ND J	28	ND	24	ND J	23	ND
trans-1,3-Dichloropropene	ND	28	ND	24	ND	23	ND	8.6
1,1,2-Trichloroethane	1000	ND	28	ND	24	ND	23	ND
Tetrachloroethene	ND J	28	ND	24	ND J	23	ND	8.6
Methylcyclohexane	ND	28	ND	24	ND	23	ND	8.6
Dibromochloromethane	ND	28	ND	24	ND	23	ND	8.6
1,2-Dibromochloromethane	ND J	28	ND	24	ND J	23	ND	8.6
2-Hexanone	ND J	56	ND L	48	ND J	23	ND L	17
Chlorobenzene	1000	ND J	28	ND	24	ND J	23	ND
Ethylbenzene	ND J	28	ND	24	ND J	23	ND	8.6
m/p-Xylene	ND J	28	ND	24	ND J	23	ND	8.6
o-Xylene	ND J	28	ND	24	ND J	23	ND	8.6
Styrene	ND J	28	ND	24	ND J	23	ND	8.6
Bromoform	1000	ND	28	ND	24	ND	23	ND
Isopropylbenzene	ND J	28	ND	24	ND J	23	ND	8.6
1,1,2,2-Tetrachloroethane	1000	ND J	28	ND	24	ND J	23	ND
1,3-Dichlorobenzene	100000	ND J	28	ND J	24	ND J	23	ND
1,4-Dichlorobenzene	100000	ND J	28	ND	24	ND J	23	ND
1,2-Dichlorobenzene	50000	ND J	28	ND	24	ND J	23	ND
1,2-Dibromo-3-Chloropropane	ND J	28	ND L	24	ND J	23	ND L	8.6
1,2,4-Trichlorobenzene	100000	ND J	28	ND L	24	ND J	23	ND L
1,2,3-Trichlorobenzene	ND J	28	ND L	24	ND J	23	ND L	8.6

Notes:
 RL = Reporting Limit
 TCL = Target Compound List
 VOC = Volatile Organic Compounds
 ug/kg = micrograms per kilograms
 ND = Non detected value
 J = The reported value is an estimate.
 L = The reported value may be biased low.
 K = The reported value may be biased high.

Table 2.
Dump Area C
Analytical Summary
TCL VOC Analysis - Mansfield Trail Dump
March 12 to 14, 2012

Sample Number:	S-071-0210-001	S-072-0208-001	S-073-0104-001	S-074-0408-001	S-075-0210-001	S-076-0208-001	S-077-0207-001	S-078-0208-001
Sampling Location:	S-071	S-072	S-073	S-074	S-075	S-076	S-077	S-078
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Date Sampled:	3/13/2012	3/13/2012	3/13/2012	3/13/2012	3/13/2012	3/13/2012	3/13/2012	3/13/2012
Parameter	Result	RL	Result	RL	Result	RL	Result	RL
Dichlorodifluoromethane	ND	26	ND	18	ND	35	ND	26
Chloromethane	ND	26	ND	18	ND	35	ND	26
Vinyl Chloride	10000	ND	26	ND	18	ND	35	ND
Bromomethane	1000	ND J	100	ND J	71	ND J	140	ND J
Chloroethane	ND	26	ND	18	ND	35	ND	26
Trichlorofluoromethane	ND	26	ND	18	ND	35	ND	26
1,1-Dichloroethene	ND	26	ND	18	ND	35	ND	26
1,1,2-Trichloro-1,2,2-Trifluoroethane	1000	ND	26	ND	18	ND	35	ND
Carbon Disulfide	ND	26	ND	18	ND	35	ND	26
Acetone	100000	130	51	440	36	330	71	170
Methyl Acetate	ND J	51	ND J	36	ND J	71	ND J	52
Methylene Chloride	ND	26	ND	18	ND	35	ND	26
trans-1,2-Dichloroethene	ND	26	ND	18	ND	35	ND	26
Methyl tert-Butyl Ether	ND	26	ND	18	ND	35	ND	26
1,1-Dichloroethane	ND	26	ND	18	ND	35	ND	26
cis-1,2-Dichloroethene	ND	26	ND	18	ND	35	ND	26
2-Butanone	50000	ND	51	ND	36	ND	71	ND
Bromodichloromethane	ND	26	ND	18	ND	35	ND	26
Chloroform	1000	ND	26	ND	18	ND	35	ND
1,1,1-Trichloroethane	50000	ND	26	ND	18	ND	35	ND
Cyclohexane	ND	26	ND	18	ND	35	ND	26
Carbon Tetrachloride	1000	ND	26	ND	18	ND	35	ND
Benzene	1000	ND	26	ND	18	ND	35	ND
1,2-Dichloroethane	1000	ND	26	ND	18	ND	35	ND
Trichloroethene	1000	ND	26	ND	18	ND	35	ND
1,2-Dichloropropane	ND	26	ND	18	ND	35	ND	26
Bromodichloromethane	ND	26	ND	18	ND	35	ND	26
cis-1,3-Dichloropropene	ND	26	ND	18	ND	35	ND	26
4-Methyl-2-Pentanone	ND	51	ND J	36	ND J	71	ND	52
Toluene	500000	ND	26	ND J	18	ND J	35	ND
trans-1,3-Dichloropropene	ND	26	ND	18	ND	35	ND	26
1,1,2-Trichloroethane	1000	ND	26	ND	18	ND	35	ND
Tetrachloroethene	ND	26	ND J	18	ND J	35	ND	26
Methylcyclohexane	ND	26	ND	18	ND	35	ND	26
Dibromochloromethane	ND	26	ND	18	ND	35	ND	26
1,2-Dibromoethane	ND	26	ND J	18	ND J	35	ND	26
2-Hexanone	ND L	51	ND J	36	ND J	71	ND	52
Chlorobenzene	1000	ND	26	ND J	18	ND J	35	ND
Ethylbenzene	ND	26	ND J	18	ND J	35	ND	26
m/p-Xylene	ND	26	ND J	18	ND J	35	ND	26
o-Xylene	ND	26	ND J	18	ND J	35	ND	26
Styrene	ND	26	ND J	18	ND J	35	ND	26
Bromoform	1000	ND	26	ND	18	ND	35	ND
Isopropylbenzene	ND	26	ND J	18	ND J	35	ND	26
1,1,2,2-Tetrachloroethane	1000	ND	26	ND J	18	ND J	35	ND
1,3-Dichlorobenzene	100000	ND J	26	ND J	18	ND J	35	ND
1,4-Dichlorobenzene	100000	ND	26	ND J	18	ND J	35	ND
1,2-Dichlorobenzene	50000	ND	26	ND J	18	ND J	35	ND
1,2-Dibromo-3-Chloropropane	ND L	26	ND J	18	ND J	35	ND	26
1,2,4-Trichlorobenzene	100000	ND L	26	ND J	18	ND J	35	ND
1,2,3-Trichlorobenzene	ND L	26	ND J	18	ND J	35	ND	26

Notes:
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Table 2.
Dump Area C
Analytical Summary
TCL VOC Analysis - Mansfield Trail Dump
March 12 to 14, 2012

Sample Number:	S-079-0207-001	S-079-0207-002	S-080-0212-001	S-081-0208-001	S-082-0212-001	S-083-0210-001	S-084-0211-001	S-085-0206-001
Sampling Location:	S-079	S-079	S-080	S-081	S-082	S-083	S-084	S-085
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Date Sampled:	3/14/2012	3/14/2012	3/14/2012	3/14/2012	3/14/2012	3/14/2012	3/14/2012	3/14/2012
Parameter	Result	RL	Result	RL	Result	RL	Result	RL
Dichlorodifluoromethane	ND	20	ND	20	ND	21	ND	22
Chloromethane	ND	20	ND	20	ND	21	ND	22
Vinyl Chloride	10000	ND	20	ND	20	ND	21	ND
Bromomethane	1000	ND J	82	ND J	86	ND J	83	ND J
Chloroethane	ND	20	ND	20	ND	21	ND	22
Trichlorofluoromethane	ND	20	ND	20	ND	21	ND	22
1,1-Dichloroethene	ND	20	ND	20	ND	21	ND	22
1,1,2-Trichloro-1,2,2-Trifluoroethane	1000	ND	20	ND	21	ND	21	ND
Carbon Disulfide	ND	20	ND	20	ND	21	ND	22
Acetone	100000	ND	41	69	41	77	43	120
Methyl Acetate	ND J	41	ND J	41	ND J	43	ND J	42
Methyl Chloride	ND	20	ND	20	ND	21	ND	22
trans-1,2-Dichloroethene	ND	20	ND	20	ND	21	ND	22
Methyl tert-Butyl Ether	ND	20	ND	20	ND	21	ND	22
1,1-Dichloroethane	ND	20	ND	20	ND	21	ND	22
cis-1,2-Dichloroethane	ND	20	ND	20	ND	21	ND	22
2-Butanone	50000	ND J	41	ND J	41	ND J	43	ND J
Bromodichloromethane	ND	20	ND	20	ND	21	ND	22
Chloroform	1000	ND	20	ND	20	ND	21	ND
1,1,1-Trichloroethane	50000	ND	20	ND	20	ND	21	ND
Cyclohexane	ND J	20	ND J	20	ND J	21	ND J	21
Carbon Tetrachloride	1000	ND	20	ND	20	ND	21	ND
Benzene	1000	ND	20	ND	20	ND	21	ND
1,2-Dichloroethane	1000	ND	20	ND	20	ND	21	ND
Trichloroethene	1000	ND	20	ND	20	ND	21	ND
1,2-Dichloropropane	ND	20	ND	20	ND	21	ND	22
Bromodichloromethane	ND	20	ND	20	ND	21	ND	22
cis-1,3-Dichloropropene	ND	20	ND	20	ND	21	ND	22
4-Methyl-2-Pentanone	ND J	41	ND J	41	ND J	43	ND J	42
Toluene	500000	ND J	20	ND J	20	ND J	21	ND
trans-1,3-Dichloropropene	ND	20	ND	20	ND	21	ND	22
1,1,2-Trichloroethane	1000	ND	20	ND	20	ND	21	ND
Tetrachloroethane	ND J	20	ND J	20	ND J	21	ND	22
Methylcyclohexane	ND	20	ND	20	ND	21	ND	22
Dibromochloromethane	ND	20	ND	20	ND	21	ND	22
1,2-Dibromooethane	ND J	20	ND J	20	ND J	21	ND	22
2-Hexanone	ND J	41	ND J	41	ND J	43	ND J	44
Chlorobenzene	1000	ND J	20	ND J	20	ND J	21	ND
Ethylbenzene	ND J	20	ND J	20	ND J	21	ND	22
m/p-Xylene	ND J	20	ND J	20	ND J	21	ND	22
o-Xylene	ND J	20	ND J	20	ND J	21	ND	22
Styrene	ND J	20	ND J	20	ND J	21	ND	22
Bromofarm	1000	ND L	20	ND	20	ND	21	ND
Isopropylbenzene	ND J	20	ND J	20	ND J	21	ND	22
1,1,2,2-Tetrachloroethane	1000	ND J	20	ND J	20	ND J	21	ND
1,3-Dichlorobenzene	100000	ND J	20	ND J	20	ND J	21	ND
1,4-Dichlorobenzene	100000	ND J	20	ND J	20	ND J	21	ND
1,2-Dichlorobenzene	50000	ND J	20	ND J	20	ND J	21	ND
1,2-Dibromo-3-Chloropropane	ND J	20	ND J	20	ND J	21	ND	22
1,2,4-Trichlorobenzene	100000	ND J	20	ND J	20	ND J	21	ND
1,2,5-Trichlorobenzene	ND J	20	ND J	20	ND J	21	ND	22

Notes:
 RL = Reporting Limit
 TCL = Target Compound List
 VOC = Volatile Organic Compounds
 ug/kg = micrograms per kilograms
 ND = Non detected value
 J = The reported value is an estimate.
 L = The reported value may be biased low.
 K = The reported value may be biased high.

Table 2.
Dump Area C
Analytical Summary
TCL VOC Analysis - Mansfield Trail Dump
March 12 to 14, 2012

Sample Number:	S-086-0408-001	S-087-0207-001	S-088-0208-001	S-089-0206-001	S-090-0212-001	S-091-0207-001	S-092-0212-001	S-093-0210-001
Sampling Location:	S-086	S-087	S-088	S-089	S-090	S-091	S-092	S-093
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Date Sampled:	3/14/2012	3/14/2012	3/14/2012	3/14/2012	3/14/2012	3/14/2012	3/14/2012	3/14/2012
Parameter	Result	RL	Result	RL	Result	RL	Result	RL
Dichlorodifluoromethane	ND	15	ND	6.3	ND	26	ND	24
Chloromethane	ND	15	ND	6.3	ND	26	ND	24
Vinyl Chloride	ND	15	ND	6.3	ND	26	ND	24
Bromomethane	ND	15	ND	6.3	ND	26	ND	24
Chloroethane	ND	15	ND	6.3	ND	26	ND	24
Trichlorofluoromethane	ND	15	ND	6.3	ND	26	ND	24
1,1-Dichloroethane	ND	15	ND	6.3	ND	26	ND	24
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	15	ND	6.3	ND	26	ND	24
Carbon Disulfide	ND	15	ND	6.3	ND	26	ND	24
Acetone	110	31	150	13	180	53	210	48
Methyl Acetate	ND	15	ND	6.3	ND	26	ND	24
Methylene Chloride	ND	15	ND	6.3	ND	26	ND	24
trans-1,2-Dichloroethane	ND	15	ND	6.3	ND	26	ND	24
Methyl tert-Butyl Ether	ND	15	ND	6.3	ND	26	ND	24
1,1-Dichloroethane	ND	15	ND	6.3	ND	26	ND	24
cis-1,2-Dichloroethane	ND	15	ND	6.3	ND	26	ND	24
2-Butanone	ND	15	ND	6.3	ND	26	ND	24
Bromodichloromethane	ND	15	ND	6.3	ND	26	ND	24
Chloroform	ND	15	ND	6.3	ND	26	ND	24
1,1,1-Trichloroethane	ND	15	ND	6.3	ND	26	ND	24
Cyclohexane	ND	15	ND	6.3	ND	26	ND	24
Carbon Tetrachloride	ND	15	ND	6.3	ND	26	ND	24
Benzene	ND	15	ND	6.3	ND	26	ND	24
1,2-Dichloroethane	ND	15	ND	6.3	ND	26	ND	24
Trichloroethane	ND	15	ND	6.3	ND	26	ND	24
1,2-Dichloropropane	ND	15	ND	6.3	ND	26	ND	24
Bromodichloromethane	ND	15	ND	6.3	ND	26	ND	24
cis-1,3-Dichloropropene	ND	15	ND	6.3	ND	26	ND	24
4-Methyl-2-Pentanone	ND	15	ND	6.3	ND	26	ND	24
Toluene	ND	15	ND	6.3	ND	26	ND	24
trans-1,3-Dichloropropene	ND	15	ND	6.3	ND	26	ND	24
1,1,2-Trichloroethane	ND	15	ND	6.3	ND	26	ND	24
Tetrachloroethane	ND	15	ND	6.3	ND	26	ND	24
Methylcyclohexane	ND	15	ND	6.3	ND	26	ND	24
Dibromochloromethane	ND	15	ND	6.3	ND	26	ND	24
1,2-Dibromomethane	ND	15	ND	6.3	ND	26	ND	24
2-Hexanone	ND	15	ND	6.3	ND	26	ND	24
Chlorobenzene	ND	15	ND	6.3	ND	26	ND	24
Ethylbenzene	ND	15	ND	6.3	ND	26	ND	24
m/p-Xylene	ND	15	ND	6.3	ND	26	ND	24
o-Xylene	ND	15	ND	6.3	ND	26	ND	24
Styrene	ND	15	ND	6.3	ND	26	ND	24
Bromoform	ND	15	ND	6.3	ND	26	ND	24
Isopropylbenzene	ND	15	ND	6.3	ND	26	ND	24
1,1,2,2-Tetrachloroethane	ND	15	ND	6.3	ND	26	ND	24
1,3-Dichlorobenzene	ND	15	ND	6.3	ND	26	ND	24
1,4-Dichlorobenzene	ND	15	ND	6.3	ND	26	ND	24
1,2-Dichlorobenzene	ND	15	ND	6.3	ND	26	ND	24
1,2-Dibromo-3-Chloropropane	ND	15	ND	6.3	ND	26	ND	24
1,2,4-Trichlorobenzene	ND	15	ND	6.3	ND	26	ND	24
1,2,3-Trichlorobenzene	ND	15	ND	6.3	ND	26	ND	24

Notes:
 RL = Reporting Limit
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 VOC = Volatile Organic Compounds
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 L = The reported value may be biased low.
 K = The reported value may be biased high.

Table 2.
Dump Area C
Analytical Summary
TCL VOC Analysis - Mansfield Trail Dump
March 12 to 14, 2012

Sample Number:		S-094-0210-001	S-095-0208-001	S-096-1220-001			
Sampling Location:		S-094	S-095	S-096			
Matrix:	Matrix	Soil	Soil	Soil			
Units:	Units	ug/kg	ug/kg	ug/kg			
Date Sampled:	Date	3/14/2012	3/14/2012	3/14/2012			
Parameter	Parameter	Result	RL	Result	RL	Result	RL
Dichlorodifluoromethane		ND	20	ND	10	ND	28
Chloromethane		ND	20	ND	10	ND	28
Vinyl Chloride	10000	ND	20	ND	10	ND	28
Bromomethane	1000	ND J	78	ND J	10	ND J	28
Chloroethane		ND	20	ND	10	ND	28
Trichlorofluoromethane		ND	20	ND	10	ND	28
1,1-Dichloroethene		ND	20	ND	10	ND	28
1,1,2-Trichloro-1,2,2-Trifluoroethane	1000	ND	20	ND	10	ND	28
Carbon Disulfide		ND	20	ND	10	ND	28
Acetone	100000	530	39	160	20	200	56
Methyl Acetate		ND J	39	ND L	10	ND L	28
Methylene Chloride		ND	20	ND	10	ND	28
trans-1,2-Dichloroethene		ND	20	ND	10	ND	28
Methyl tert-Butyl Ether		ND	20	ND	10	ND	28
1,1-Dichloroethane		ND	20	ND	10	ND	28
cis-1,2-Dichloroethene		ND	20	ND	10	ND	28
2-Butanone	50000	79 J	39	33	20	ND	56
Bromodichloromethane		ND	20	ND	10	ND	28
Chloroform	1000	ND	20	ND	10	ND	28
1,1,1-Trichloroethane	50000	ND	20	ND	10	ND	28
Cyclohexane		ND J	20	ND	10	ND	28
Carbon Tetrachloride	1000	ND	20	ND	10	ND	28
Benzene	1000	ND	20	ND	10	ND	28
1,2-Dichloroethane	1000	ND	20	ND	10	ND	28
Trichloroethene	1000	ND	20	ND	10	ND	28
1,2-Dichloropropane		ND	20	ND	10	ND	28
Bromodichloromethane		ND	20	ND	10	ND	28
cis-1,3-Dichloropropene		ND	20	ND	10	ND	28
4-Methyl-2-Pentanone		ND J	39	ND	20	ND	56
Toluene	500000	ND	20	300	10	ND	28
trans-1,3-Dichloropropene		ND	20	ND	10	ND	28
1,1,2-Trichloroethane	1000	ND	20	ND	10	ND	28
Tetrachloroethene		ND	20	ND	10	ND	28
Methylcyclohexane		ND	20	ND	10	ND	28
Dibromochloromethane		ND	20	ND	10	ND	28
1,2-Dibromoethane		ND	20	ND	10	ND	28
2-Hexanone		ND J	39	ND	20	ND	56
Chlorobenzene	1000	ND	20	ND	10	ND	28
Ethylbenzene		ND	20	ND	10	ND	28
m/p-Xylene		ND	20	ND	10	ND	28
o-Xylene		ND	20	ND	10	ND	28
Styrene		ND	20	ND	10	ND	28
Bromoform	1000	ND	20	ND	10	ND	28
Isopropylbenzene		ND	20	ND	10	ND	28
1,1,2,2-Tetrachloroethane	1000	ND	20	ND	10	ND	28
1,3-Dichlorobenzene	100000	ND J	20	ND J	10	ND J	28
1,4-Dichlorobenzene	100000	ND	20	ND	10	ND	28
1,2-Dichlorobenzene	50000	ND	20	ND	10	ND	28
1,2-Dibromo-3-Chloropropane		ND J	20	ND	10	ND	28
1,2,4-Trichlorobenzene	100000	ND L	20	ND	10	ND	28
1,2,3-Trichlorobenzene		ND L	20	ND	10	ND	28

Notes:

RL = Reporting Limit
TCL = Target Compound List
VOC = Volatile Organic Compounds
ug/kg = micrograms per kilograms
ND = Non detected value
J = The reported value is an estimate.
L = The reported value may be biased low.
K = The reported value may be biased high.

Table 3.
Dump Area E
Analytical Summary
TCL VOC Analysis - Mansfield Trail Dump
March 29, 2012

Sample Number	S-166-0103-001	S-166-0103-002	S-167-0103-001	S-168-0103-001	S-169-0103-001	S-170-0103-001	S-171-0103-001	S-172-0103-001										
Sampling Location	S-166	S-166	S-167	S-168	S-169	S-170	S-171	S-172										
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil										
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg										
Date Sampled	3/29/2012	3/29/2012	3/29/2012	3/29/2012	3/29/2012	3/29/2012	3/29/2012	3/29/2012										
Parameter	Result	RL	Result	RL	Result	RL	Result	RL										
Dichlorodifluoromethane	ND	8	ND	8.3	ND	8.2	ND	8.9	ND	8.1								
Chloromethane	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	8.1						
Vinyl Chloride	10000	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	8.1					
Bromomethane	1000	ND	J	8	ND	J	8.2	ND	J	7.3	ND	J	8.7	ND	8.1			
Chloroethane	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1		
Trichlorofluoromethane	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1		
1,1-Dichloroethane	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1		
1,1,2-Trichloro-1,2,2-Trifluoroethane	1000	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1	
Carbon Disulfide	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1		
Acetone	100000	46	16	68	17	66	16	58	15	78	17	270	26	190	18	75	16	
Methyl Acetate	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1		
Methylene Chloride	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1		
trans-1,2-Dichloroethene	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1		
Methyl tert-Butyl Ether	ND	J	8	ND	J	8.3	ND	J	8.2	ND	J	7.3	ND	J	8.7	ND	J	8.1
1,1-Dichloroethene	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1		
cis-1,2-Dichloroethene	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1		
2-Butanone	50000	ND	16	ND	17	ND	16	ND	15	ND	17	35	26	22	18	ND	16	
Bromochloromethane	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1		
Chloroform	1000	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1	
1,1,1-Trichloroethane	50000	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1	
Cyclohexane	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1		
Carbon Tetrachloride	1000	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1	
Benzene	1000	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1	
1,2-Dichloroethane	1000	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1	
Trichloroethene	1000	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1	
1,2-Dichloropropane	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1		
Bromodichloromethane	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1		
cis-1,3-Dichloropropene	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1		
4-Methyl-2-Pentanone	ND	16	ND	17	ND	16	ND	15	ND	17	ND	26	ND	18	ND	16		
Toluene	500000	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1	
trans-1,3-Dichloropropene	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1		
1,1,2-Trichloroethane	1000	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1	
Tetrachloroethene	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1		
Methylcyclohexane	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1		
Dibromochloromethane	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1		
1,2-Dibromoethane	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1		
2-Hexanone	ND	16	ND	17	ND	16	ND	15	ND	17	ND	26	ND	18	ND	16		
Chlorobenzene	1000	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1	
Ethylbenzene	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1		
m/p-Xylene	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1		
o-Xylene	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1		
Styrene	ND	L	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1	
Bromoform	1000	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1	
Isopropylbenzene	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1		
1,1,2,2-Tetrachloroethane	1000	ND	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1	
1,3-Dichlorobenzene	100000	ND	L	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1
1,4-Dichlorobenzene	100000	ND	L	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1
1,2-Dichlorobenzene	50000	ND	L	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1
1,2-Dibromo-3-Chloropropane	ND	L	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1	
1,2,4-Trichlorobenzene	100000	ND	L	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1
1,2,3-Trichlorobenzene	ND	L	8	ND	8.3	ND	8.2	ND	7.3	ND	8.7	ND	13	ND	8.9	ND	8.1	

Notes:
 RL = Reporting Limit
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Table 3.
Dump Area E
Analytical Summary
TCL VOC Analysis - Mansfield Trail Dump
March 29, 2012

Sample Number:	S-173-0103-001	S-174-0103-001	S-175-0103-001	S-176-0103-001	S-177-0103-001	S-178-0103-001	S-179-0103-001	S-180-0103-001
Sampling Location:	S-173	S-174	S-175	S-176	S-177	S-178	S-179	S-180
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Date Sampled:	3/29/2012	3/29/2012	3/29/2012	3/29/2012	3/29/2012	3/29/2012	3/29/2012	3/29/2012
Parameter:	Result	RL	Result	RL	Result	RL	Result	RL
Dichlorodifluoromethane	ND	8.9	ND	9.6	ND	8.6	ND	9.3
Chloromethane	ND	8.9	ND	9.6	ND	8.6	ND	9.3
Vinyl Chloride	ND	8.9	ND	9.6	ND	8.6	ND	9.3
Bromomethane	ND	8.9	ND	9.6	ND	8.6	ND	9.3
Chloroethane	ND	8.9	ND	9.6	ND	8.6	ND	9.3
Trichlorofluoromethane	ND	8.9	ND	9.6	ND	8.6	ND	9.3
1,1-Dichloroethane	ND	8.9	ND	9.6	ND	8.6	ND	9.3
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	8.9	ND	9.6	ND	8.6	ND	9.3
Carbon Disulfide	ND	8.9	ND	9.6	ND	8.6	ND	9.3
Acetone	190	18	180	19	150	17	230	19
Methyl Acetate	ND	8.9	ND	9.6	ND	8.6	ND	9.3
Methylene Chloride	ND	8.9	ND	9.6	ND	8.6	ND	9.3
trans-1,2-Dichloroethene	ND	8.9	ND	9.6	ND	8.6	ND	9.3
Methyl tert-Butyl Ether	ND	8.9	ND	9.6	ND	8.6	ND	9.3
1,1-Dichloroethene	ND	8.9	ND	9.6	ND	8.6	ND	9.3
cis-1,2-Dichloroethene	ND	8.9	43	9.6	24	8.6	ND	9.3
2-Butanone	ND	18	ND	19	17	17	23	19
Bromochloromethane	ND	8.9	ND	9.6	ND	8.6	ND	9.3
Chloroform	ND	8.9	ND	9.6	ND	8.6	ND	9.3
1,1,1-Trichloroethane	ND	8.9	ND	9.6	ND	8.6	ND	9.3
Cyclohexane	ND	8.9	ND	9.6	ND	8.6	ND	9.3
Carbon Tetrachloride	ND	8.9	ND	9.6	ND	8.6	ND	9.3
Benzene	ND	8.9	ND	9.6	ND	8.6	ND	9.3
1,2-Dichloroethane	ND	8.9	ND	9.6	ND	8.6	ND	9.3
Trichloroethene	11	8.9	100	9.6	82	8.6	30	9.3
1,2-Dichloropropane	ND	8.9	ND	9.6	ND	8.6	ND	9.3
Bromodichloromethane	ND	8.9	ND	9.6	ND	8.6	ND	9.3
cis-1,3-Dichloropropene	ND	8.9	ND	9.6	ND	8.6	ND	9.3
4-Methyl-2-Pentanone	ND	18	ND	9.6	ND	17	ND	19
Toluene	ND	8.9	ND	9.6	ND	8.6	ND	9.3
trans-1,3-Dichloropropene	ND	8.9	ND	9.6	ND	8.6	ND	9.3
1,1,2-Trichloroethane	ND	8.9	ND	9.6	ND	8.6	ND	9.3
Tetrachloroethene	ND	8.9	ND	9.6	ND	8.6	ND	9.3
Methylcyclohexane	ND	8.9	ND	9.6	ND	8.6	ND	9.3
Dibromochloromethane	ND	8.9	ND	9.6	ND	8.6	ND	9.3
1,2-Dibromoethane	ND	8.9	ND	9.6	ND	8.6	ND	9.3
2-Hexanone	ND	18	ND	9.6	ND	17	ND	19
Chlorobenzene	ND	8.9	ND	9.6	ND	8.6	ND	9.3
Ethylbenzene	ND	8.9	ND	9.6	ND	8.6	ND	9.3
m/p-Xylene	ND	8.9	ND	9.6	ND	8.6	ND	9.3
o-Xylene	ND	8.9	ND	9.6	ND	8.6	ND	9.3
Styrene	ND	8.9	ND	9.6	ND	8.6	ND	9.3
Bromoform	ND	8.9	ND	9.6	ND	8.6	ND	9.3
Isopropylbenzene	ND	8.9	ND	9.6	ND	8.6	ND	9.3
1,1,2,2-Tetrachloroethane	ND	8.9	ND	9.6	ND	8.6	ND	9.3
1,3-Dichlorobenzene	ND	8.9	ND	9.6	ND	8.6	ND	9.3
1,4-Dichlorobenzene	ND	8.9	ND	9.6	ND	8.6	ND	9.3
1,2-Dichlorobenzene	ND	8.9	ND	9.6	ND	8.6	ND	9.3
1,2-Dibromo-3-Chloropropane	ND	8.9	ND	9.6	ND	8.6	ND	9.3
1,2,4-Trichlorobenzene	ND	8.9	ND	9.6	ND	8.6	ND	9.3
1,2,3-Trichlorobenzene	ND	8.9	ND	9.6	ND	8.6	ND	9.3

Notes:
 RL = Reporting Limit
 TCL = Target Compound List
 VOC = Volatile Organic Compounds
 ug/kg = micrograms per kilograms
 ND = Non detected value
 J = The reported value is an estimate.
 L = The reported value may be biased low.
 K = The reported value may be biased high.

Table 3.
Dump Area E
Analytical Summary
TCL VOC Analysis - Mansfield Trail Dump
March 29, 2012

Sample Number:	S-181-0103-001	S-182-0103-001	S-183-0103-001	S-184-0103-001					
Sampling Location:	S-181	S-182	S-183	S-184					
Matrix:	Soil	Soil	Soil	Soil					
Units:	ug/kg	ug/kg	ug/kg	ug/kg					
Date Sampled:	3/29/2012	3/29/2012	3/29/2012	3/29/2012					
Parameter	Result	RL	Result	RL	Result	RL	Result	RL	
Dichlorodifluoromethane	ND	9.7	ND	14	ND	19	ND	11	
Chloromethane	ND	9.7	ND	14	ND	19	ND	11	
Vinyl Chloride	10000	ND	9.7	ND	14	ND	19	ND	11
Bromomethane	1000	ND J	9.7	ND J	14	ND J	19	ND J	11
Chloroethane	ND	9.7	ND	14	ND	19	ND	11	
Trichlorofluoromethane	ND	9.7	ND	14	ND	19	ND	11	
1,1-Dichloroethane	ND	9.7	ND	14	ND	19	ND	11	
1,1,2-Trichloro-1,2,2-Trifluoroethane	1000	ND	9.7	ND	14	ND	19	ND	11
Carbon Disulfide	ND	9.7	ND	14	ND	19	ND	11	
Acetone	100000	320	19	310	28	380	39	410	21
Methyl Acetate	ND	9.7	ND	14	ND	19	ND	11	
Methylene Chloride	ND	9.7	ND	14	ND	19	ND	11	
trans-1,2-Dichloroethene	ND	9.7	ND	14	ND	19	ND	11	
Methyl tert-Butyl Ether	ND J	9.7	ND J	14	ND J	19	ND J	11	
1,1-Dichloroethene	ND	9.7	ND	14	ND	19	ND	11	
cis-1,2-Dichloroethene	ND	9.7	ND	14	ND	19	ND	11	
2-Butanone	50000	34	19	74	28	98	39	38	21
Bromochloromethane	ND	9.7	ND	14	ND	19	ND	11	
Chloroform	1000	ND	9.7	ND	14	ND	19	ND	11
1,1,1-Trichloroethane	50000	ND	9.7	ND	14	ND	19	ND	11
Cyclohexane	ND	9.7	ND	14	ND	19	ND	11	
Carbon Tetrachloride	1000	ND	9.7	ND	14	ND	19	ND	11
Benzene	1000	ND	9.7	ND	14	ND	19	ND	11
1,2-Dichloroethane	1000	ND	9.7	ND	14	ND	19	ND	11
Trichloroethene	1000	ND	9.7	ND	14	ND	19	ND	11
1,2-Dichloropropane	ND	9.7	ND	14	ND	19	ND	11	
Bromodichloromethane	ND	9.7	ND	14	ND	19	ND	11	
cis-1,3-Dichloropropene	ND	9.7	ND	14	ND	19	ND	11	
4-Methyl-2-Pentanone	ND	19	ND	28	ND	39	ND	21	
Toluene	500000	ND	9.7	ND	14	ND	19	ND	11
trans-1,3-Dichloropropene	ND	9.7	ND	14	ND	19	ND	11	
1,1,2-Trichloroethane	1000	ND	9.7	ND	14	ND	19	ND	11
Tetrachloroethene	ND	9.7	ND	14	ND	19	ND	11	
Methylcyclohexane	ND	9.7	ND	14	ND	19	ND	11	
Dibromochloromethane	ND	9.7	ND	14	ND	19	ND	11	
1,2-Dibromoethane	ND	9.7	ND	14	ND	19	ND	11	
2-Hexanone	ND	19	ND	28	ND	39	ND	21	
Chlorobenzene	1000	ND	9.7	ND	14	ND	19	ND	11
Ethylbenzene	ND	9.7	ND	14	ND	19	ND	11	
m/p-Xylene	ND	9.7	ND	14	ND	19	ND	11	
o-Xylene	ND	9.7	ND	14	ND	19	ND	11	
Styrene	ND	9.7	ND	14	ND	19	ND	11	
Bromoform	1000	ND	9.7	ND	14	ND	19	ND	11
Isopropylbenzene	ND	9.7	ND	14	ND	19	ND	11	
1,1,2,2-Tetrachloroethane	1000	ND	9.7	ND	14	ND	19	ND	11
1,3-Dichlorobenzene	100000	ND	9.7	ND	14	ND	19	ND	11
1,4-Dichlorobenzene	100000	ND	9.7	ND	14	ND	19	ND	11
1,2-Dichlorobenzene	50000	ND	9.7	45	14	41	19	32	11
1,2-Dibromo-3-Chloropropane	ND	9.7	ND	14	ND	19	ND	11	
1,2,4-Trichlorobenzene	100000	ND	9.7	ND	14	ND	19	ND	11
1,2,3-Trichlorobenzene	ND	9.7	ND	14	ND	19	ND	11	

Notes:
 RL = Reporting Limit
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 VOC = Volatile Organic Compounds
 ug/kg = micrograms per kilograms
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 J = The reported value is an estimate.
 L = The reported value may be biased low.
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Table 4.
Dump Area A
Analytical Summary
TCL VOC Analysis - Mansfield Trail Dump
March 15 and 16, 2012

Sample Number:	S-097-S253-001	S-098-S051-001	S-099-S051-001	S-100-S051-001	S-101-S253-001	S-102-2627-001	S-103-1213-001	S-104-1213-001
Sampling Location:	S-097	S-098	S-099	S-100	S-101	S-102	S-103	S-104
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Unit:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Date Sampled:	3/15/2012	3/15/2012	3/15/2012	3/15/2012	3/15/2012	3/15/2012	3/15/2012	3/15/2012
Parameter	Result	RL	Result	RL	Result	RL	Result	RL
Dichlorodifluoromethane	ND J	6.4	ND	6.5	ND J	7	ND	10
Chloromethane	ND	6.4	ND	6.5	ND	7	ND	10
Vinyl Chloride	10000	ND	6.4	ND	6.5	ND	7	ND
Bromomethane	1800	ND J	6.4	ND J	6.5	ND J	7	ND J
Chloroethane	ND	6.4	ND	6.5	ND	7	ND	10
Trichlorofluoromethane	ND	6.4	ND	6.5	ND	7	ND	10
1,1-Dichloroethane	ND	6.4	ND	6.5	ND	7	ND	10
1,1,2-Trichloro-1,2,2-Trifluoroethane	1000	ND	6.4	ND	6.5	ND	7	ND
Carbon Disulfide	ND	6.4	ND	6.5	ND	7	ND	10
Acetone	100000	73	13	94	13	180	14	150
Methyl Acetate	ND	6.4	ND	6.5	ND	7	ND	10
Methylene Chloride	ND	6.4	ND	6.5	ND	7	ND	10
trans-1,2-Dichloroethane	ND	6.4	ND	6.5	ND	7	ND	10
Methyl tert-Butyl Ether	ND	6.4	ND	6.5	ND	7	ND	10
1,1-Dichloroethane	ND	6.4	ND	6.5	ND	7	ND	10
cis-1,2-Dichloroethane	ND	6.4	61	6.5	33	7	31	10
2-Butanone	50000	ND	13	42	13	25	14	99
Bromochloromethane	ND	6.4	ND	6.5	ND	7	ND	10
Chloroform	1000	ND	6.4	ND	6.5	ND	7	ND
1,1,1-Trichloroethane	50000	ND	6.4	ND	6.5	ND	7	ND
Cyclohexane	ND	6.4	ND	6.5	ND	7	ND	10
Carbon Tetrachloride	1000	ND	6.4	ND	6.5	ND	7	ND
Benzene	1000	ND	6.4	ND	6.5	ND	7	ND
1,2-Dichloroethane	1000	ND	6.4	ND	6.5	ND	7	ND
Trichloroethane	1000	ND	6.4	52	6.5	148	7	51
1,2-Dichloropropane	ND	6.4	ND	6.5	ND	7	ND	10
Bromodichloromethane	ND	6.4	ND	6.5	ND	7	ND	10
cis-1,3-Dichloropropene	ND	6.4	ND	6.5	ND	7	ND	10
4-Methyl-2-Pentanone	ND	6.4	ND	13	ND J	14	ND	20
Toluene	500000	ND	6.4	ND	6.5	ND J	7	ND
trans-1,3-Dichloropropene	ND	6.4	ND	6.5	ND	7	ND	10
1,1,2-Trichloroethane	1000	ND	6.4	ND	6.5	ND	7	ND
Tetrachloroethane	ND	6.4	ND	6.5	ND J	7	ND	10
Methylcyclohexane	ND	6.4	ND	6.5	ND	7	ND	10
Dibromochloromethane	ND	6.4	ND	6.5	ND	7	ND	10
1,2-Dibromomethane	ND	6.4	ND	6.5	ND J	7	ND	10
2-Hexanone	ND	6.4	ND	13	ND J	14	ND	20
Chlorobenzene	1000	ND	6.4	ND	6.5	ND J	7	ND
Ethylbenzene	ND	6.4	ND	6.5	ND J	7	ND	10
m/p-Xylene	ND	6.4	ND	6.5	ND J	7	ND	10
o-Xylene	ND	6.4	ND	6.5	ND J	7	ND	10
Styrene	ND	6.4	ND	6.5	ND J	7	ND	10
Bromoform	1000	ND	6.4	ND	6.5	ND	7	ND
Isopropylbenzene	ND	6.4	ND	6.5	ND J	7	ND	10
1,1,2,2-Tetrachloroethane	1000	ND	6.4	ND	6.5	ND J	7	ND
1,3-Dichlorobenzene	100000	ND	6.4	ND J	6.5	ND J	7	20
1,4-Dichlorobenzene	100000	ND	6.4	18	6.5	13	7	36
1,2-Dichlorobenzene	50000	ND	6.4	45	6.5	28	7	79
1,2-Dibromo-3-Chloropropane	ND	6.4	ND	6.5	ND J	7	ND	10
1,2,4-Trichlorobenzene	100000	ND	6.4	ND	6.5	ND J	7	29
1,2,3-Trichlorobenzene	ND	6.4	ND	6.5	ND J	7	15	10

Notes:
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Table 4.
Dump Area A
Analytical Summary
TCL VOC Analysis - Mansfield Trail Dump
March 15 and 16, 2012

Sample Number:	S-104-1213-002	S-105-0607-001	S-106-2425-001	S-107-1617-001	S-108-0607-001	S-109-2425-001	S-110-2627-001	S-111-2930-001
Sampling Location:	S-104	S-105	S-106	S-107	S-108	S-109	S-110	S-111
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Unit:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Date Sampled:	3/15/2012	3/15/2012	3/15/2012	3/15/2012	3/15/2012	3/15/2012	3/15/2012	3/15/2012
Parameter	Result	RL	Result	RL	Result	RL	Result	RL
Dichlorodifluoromethane	ND	7.2	ND	7.3	ND	5.6	ND	18
Chloromethane	ND	7.2	ND	7.3	ND	5.6	ND	18
Vinyl Chloride	10000	ND	7.2	7.3	ND	5.6	ND	18
Bromomethane	1000	ND J	7.2	7.3	ND J	5.6	ND J	18
Chloroethane	ND	7.2	ND	7.3	ND	5.6	ND	18
Trichlorofluoromethane	ND	7.2	ND	7.3	ND	5.6	ND	18
1,1-Dichloroethene	ND	7.2	ND	7.3	ND	5.6	ND	18
1,1,2-Trichloro-1,2,2-Trifluoroethane	1000	ND	7.2	7.3	ND	5.6	ND	18
Carbon Disulfide	ND	7.2	ND	7.3	ND	5.6	ND	18
Acetone	100000	270 J	14	92	15	140 J	11	620
Methyl Acetate	ND	7.2	ND	7.3	ND	5.6	ND	18
Methylene Chloride	ND	7.2	ND	7.3	ND	5.6	ND	18
trans-1,2-Dichloroethene	ND	7.2	ND	7.3	ND	5.6	ND	18
Methyl tert-Butyl Ether	ND	7.2	ND	7.3	ND	5.6	ND	18
1,1-Dichloroethane	ND	7.2	ND	7.3	ND	5.6	ND	18
cis-1,2-Dichloroethene	ND	7.2	ND	7.3	ND	5.6	ND	18
2-Butanone	50000	39	14	45	15	14	11	150
Bromochloromethane	ND	7.2	ND	7.3	ND	5.6	ND	18
Chloroform	1000	ND	7.2	7.3	ND	5.6	ND	18
1,1,1-Trichloroethane	50000	ND	7.2	7.3	ND	5.6	ND	18
Cyclohexane	ND	7.2	ND	7.3	ND	5.6	ND	18
Carbon Tetrachloride	1000	ND	7.2	7.3	ND	5.6	ND	18
Benzene	1000	ND	7.2	7.3	ND	5.6	ND	18
1,2-Dichloroethane	1000	ND	7.2	7.3	ND	5.6	ND	18
Trichloroethene	1000	ND	7.2	7.3	ND	5.6	ND	18
1,2-Dichloropropane	ND	7.2	ND	7.3	ND	5.6	ND	18
Bromodichloromethane	ND	7.2	ND	7.3	ND	5.6	ND	18
cis-1,3-Dichloropropene	ND	7.2	ND	7.3	ND	5.6	ND	18
4-Methyl-2-Pentanone	ND	14	ND	7.3	ND	11	ND	36
Toluene	500000	ND	7.2	7.3	ND	5.6	ND	18
trans-1,3-Dichloropropene	ND	7.2	ND	7.3	ND	5.6	ND	18
1,1,2-Trichloroethane	1000	ND	7.2	7.3	ND	5.6	ND	18
Tetrachloroethene	ND	7.2	ND	7.3	ND	5.6	ND	18
Methylcyclohexane	ND	7.2	ND	7.3	ND	5.6	ND	18
Dibromochloromethane	ND	7.2	ND	7.3	ND	5.6	ND	18
1,2-Dibromoethane	ND	7.2	ND	7.3	ND	5.6	ND	18
2-Hexanone	ND	14	ND	7.3	ND	11	ND	36
Chlorobenzene	1000	ND	7.2	7.3	ND	5.6	ND	18
Ethylbenzene	ND	7.2	ND	7.3	ND	5.6	ND	18
m/p-Xylene	ND	7.2	ND	7.3	ND	5.6	ND	18
o-Xylene	ND	7.2	ND	7.3	ND	5.6	ND	18
Styrene	ND	7.2	ND	7.3	ND	5.6	ND	18
Bromoform	1000	ND	7.2	7.3	ND	5.6	ND	18
Isopropylbenzene	ND	7.2	ND	7.3	ND	5.6	ND	18
1,1,2,2-Tetrachloroethane	1000	ND	7.2	7.3	ND	5.6	ND	18
1,3-Dichlorobenzene	100000	ND J	7.2	7.3	ND J	5.6	ND J	18
1,4-Dichlorobenzene	100000	ND	7.2	7.3	ND	5.6	ND	18
1,2-Dichlorobenzene	50000	ND	7.2	7.3	ND	5.6	ND	18
1,2-Dibromo-3-Chloropropane	ND	7.2	ND	7.3	ND	5.6	ND	18
1,2,4-Trichlorobenzene	100000	ND	7.2	7.3	ND	5.6	ND	18
1,2,3-Trichlorobenzene	ND	7.2	ND	7.3	ND	5.6	ND	18

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 ug/kg = micrograms per kilograms
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Table 4.
Dump Area A
Analytical Summary
TCL VOC Analysis - Mansfield Trail Dump
March 15 and 16, 2012

Sample Number:	S-112-1617-001	S-113-1415-001	S-114-2425-001	S-115-3637-001	S-116-0102-001	S-116-0102-002	S-117-0203-001	S-118-0203-001									
Sampling Location:	S-112	S-113	S-114	S-115	S-116	S-116	S-117	S-118									
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil									
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg									
Date Sampled:	3/15/2012	3/15/2012	3/15/2012	3/15/2012	3/16/2012	3/16/2012	3/16/2012	3/16/2012									
Parameter	Result	RL	Result	RL	Result	RL	Result	RL									
Dichlorodifluoromethane	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
Chloromethane	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
Vinyl Chloride	10000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
Bromomethane	1000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
Chloroethane	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
Trichlorofluoromethane	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
1,1-Dichloroethene	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
1,1,2-Trichloro-1,2,2-Trifluoroethane	1000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
Carbon Disulfide	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
Acetone	100000	250	17	130	18	99	15	200	10	200	12	210	14	130	13	74	14
Methyl Acetate	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
Methylene Chloride	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
trans-1,2-Dichloroethene	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
Methyl tert-Butyl Ether	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
1,1-Dichloroethane	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
cis-1,2-Dichloroethene	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
2-Butanone	50000	34	8.3	37	18	21	7.7	ND	10	47	12	19	14	14	13	25	14
Bromochloromethane	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
Chloroform	1000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
1,1,1-Trichloroethane	50000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
Cyclohexane	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
Carbon Tetrachloride	1000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
Benzene	1000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
1,2-Dichloroethane	1000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
Trichloroethene	1000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
1,2-Dichloropropane	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
Bromodichloromethane	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
cis-1,3-Dichloropropene	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
4-Methyl-2-Pentanone	ND	17	ND	18	ND	15	ND	10	ND	12	ND	14	ND	6.3	ND	6.9	
Toluene	500000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
trans-1,3-Dichloropropene	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
1,1,2-Trichloroethane	1000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
Tetrachloroethene	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
Methylcyclohexane	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
Dibromochloromethane	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
1,2-Dibromomethane	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
2-Hexanone	ND	17	ND	18	ND	7.7	ND	10	ND	12	ND	14	ND	6.3	ND	6.9	
Chlorobenzene	1000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
Ethylbenzene	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
m/p-Xylene	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
o-Xylene	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
Styrene	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
Bromoform	1000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
Isopropylbenzene	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
1,1,2,2-Tetrachloroethane	1000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
1,3-Dichlorobenzene	100000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
1,4-Dichlorobenzene	100000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
1,2-Dichlorobenzene	50000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
1,2-Dibromo-3-Chloropropane	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	
1,2,4-Trichlorobenzene	100000	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9
1,2,3-Trichlorobenzene	ND	8.3	ND	8.8	ND	7.7	ND	5.2	ND	5.9	ND	7	ND	6.3	ND	6.9	

Notes:
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 VOC = Volatile Organic Compounds
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 ND = Non detected value
 J = The reported value is an estimate.
 L = The reported value may be biased low.
 K = The reported value may be biased high.

Table 4.
Dump Area A
Analytical Summary
TCL VOC Analysis - Mansfield Trail Dump
March 15 and 16, 2012

Sample Number:	S-119-0203-001	S-120-0203-001	S-121-0203-001	S-122-0203-001	S-123-0203-001	S-124-0203-001	S-125-0203-001	S-126-0203-001
Sampling Location:	S-115	S-120	S-121	S-122	S-123	S-124	S-125	S-126
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Date Sampled:	3/16/2012	3/16/2012	3/16/2012	3/16/2012	3/16/2012	3/16/2012	3/16/2012	3/16/2012
Parameter	Result	RL	Result	RL	Result	RL	Result	RL
Dichlorodifluoromethane	ND	6	ND	7	ND	7.1	ND	6.7
Chloromethane	ND	6	ND	7	ND	7.1	ND	6.7
Vinyl Chloride	10000	ND	6	ND	7	ND	7.1	ND
Bromomethane	10000	ND	J	6	ND	J	7	ND
Chloroethane	ND	6	ND	7	ND	7.1	ND	6.7
Trichlorofluoromethane	ND	6	ND	7	ND	7.1	ND	6.7
1,1-Dichloroethene	ND	6	ND	7	ND	7.1	ND	6.7
1,1,2-Trichloro-1,2,2-Trifluoroethane	1000	ND	6	ND	7	ND	7.1	ND
Carbon Disulfide	ND	6	ND	7	ND	7.1	ND	6.7
Acetone	100000	160	J	6	160	14	280	J
Methyl Acetate	ND	L	6	ND	7	ND	L	7.1
Methylene Chloride	ND	6	ND	7	ND	7.1	ND	6.7
trans-1,2-Dichloroethene	ND	6	ND	7	ND	7.1	ND	6.7
Methyl tert-Butyl Ether	ND	6	ND	L	7	ND	L	7.1
1,1-Dichloroethane	ND	6	ND	7	ND	7.1	ND	6.7
cis-1,2-Dichloroethene	ND	6	ND	7	ND	7.1	ND	6.7
2-Butanone	50000	13	12	ND	14	29	14	ND
Bromochloromethane	ND	6	ND	7	ND	7.1	ND	6.7
Chloroform	1000	ND	6	ND	7	ND	7.1	ND
1,1,1-Trichloroethane	50000	ND	6	ND	7	ND	7.1	ND
Cyclohexane	ND	6	ND	7	ND	7.1	ND	6.7
Carbon Tetrachloride	1000	ND	6	ND	7	ND	7.1	ND
Benzene	1000	ND	6	ND	7	ND	7.1	ND
1,2-Dichloroethane	1000	ND	6	ND	7	ND	7.1	ND
Trichloroethene	1000	ND	6	ND	7	ND	7.1	ND
1,2-Dichloropropane	ND	6	ND	7	ND	7.1	ND	6.7
Bromodichloromethane	ND	6	ND	7	ND	7.1	ND	6.7
cis-1,3-Dichloropropene	ND	6	ND	7	ND	7.1	ND	6.7
4-Methyl-2-Pentanone	ND	12	ND	14	ND	14	ND	13
Toluene	500000	ND	6	ND	7	ND	7.1	ND
trans-1,3-Dichloropropene	ND	6	ND	7	ND	7.1	ND	6.7
1,1,2-Trichloroethane	1000	ND	6	ND	7	ND	7.1	ND
Tetrachloroethane	ND	6	ND	7	ND	7.1	ND	6.7
Methylcyclohexane	ND	6	ND	7	ND	7.1	ND	6.7
Dibromochloromethane	ND	6	ND	7	ND	7.1	ND	6.7
1,2-Dibromomethane	ND	6	ND	7	ND	7.1	ND	6.7
2-Hexanone	ND	12	ND	14	ND	14	ND	13
Chlorobenzene	1000	ND	6	ND	7	ND	7.1	ND
Ethylbenzene	ND	6	ND	7	ND	7.1	ND	6.7
m/p-Xylene	ND	6	ND	7	ND	7.1	ND	6.7
o-Xylene	ND	6	ND	7	ND	7.1	ND	6.7
Styrene	ND	6	ND	7	ND	7.1	ND	6.7
Bromoform	1000	ND	6	ND	7	ND	7.1	ND
Isopropylbenzene	ND	6	ND	7	ND	7.1	ND	6.7
1,1,2,2-Tetrachloroethane	1000	ND	6	ND	7	ND	7.1	ND
1,3-Dichlorobenzene	100000	ND	6	ND	7	ND	J	7.1
1,4-Dichlorobenzene	100000	ND	6	ND	7	ND	J	7.1
1,2-Dichlorobenzene	50000	ND	6	ND	7	ND	J	7.1
1,2-Dibromo-3-Chloropropane	ND	6	ND	7	ND	7.1	ND	6.7
1,2,4-Trichlorobenzene	100000	ND	6	ND	7	ND	J	7.1
1,2,3-Trichlorobenzene	ND	6	ND	7	ND	7.1	ND	6.7

Notes:
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Table 4.
Dump Area A
Analytical Summary
TCL VOC Analysis - Mansfield Trail Dump
March 15 and 16, 2012

Sample Number:	S-127-0203-001	S-128-0203-001	S-129-3033-001	S-130-3637-001	S-131-2223-001	S-132-4041-001	S-133-1213-001	S-134-0809-001
Sampling Location:	S-126	S-128	S-129	S-128	S-131	S-132	S-133	S-134
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Date Sampled:	3/16/2012	3/16/2012	3/16/2012	3/16/2012	3/16/2012	3/16/2012	3/16/2012	3/16/2012
Parameter	Result	RL	Result	RL	Result	RL	Result	RL
Dichlorodifluoromethane	ND	6	ND	6.1	ND	6.4	ND J	5.4
Chloromethane	ND	6	ND	6.1	ND	6.4	ND	5.4
Vinyl Chloride	10000	ND	6	ND	6.1	ND	6.4	ND
Bromomethane	1000	ND J	6	ND J	6.1	ND J	5.4	ND J
Chloroethane	ND	6	ND	6.1	ND	6.4	ND	5.4
Trichlorofluoromethane	ND	6	ND	6.1	ND	6.4	ND	5.4
1,1-Dichloroethene	ND	6	ND	6.1	ND	6.4	ND	5.4
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	6	ND	6.1	ND	6.4	ND	5.4
Carbon Disulfide	ND	6	ND	6.1	ND	6.4	ND	5.4
Acetone	84	12	32	12	87	13	33	11
Methyl Acetate	ND	6	ND	6.1	ND	6.4	ND	5.4
Methylene Chloride	ND	6	ND	6.1	ND	6.4	ND	5.4
trans-1,2-Dichloroethene	ND	6	ND	6.1	45	6.4	ND	5.4
Methyl tert-Butyl Ether	ND	6	ND	6.1	ND	6.4	ND	5.4
1,1-Dichloroethane	ND	6	ND	6.1	28	6.4	ND	5.4
cis-1,2-Dichloroethene	51	6	61	6.1	3500	6.4	25	5.4
2-Butanone	ND	12	ND	6.1	15	13	ND	11
Bromochloromethane	ND	6	ND	6.1	ND	6.4	ND	5.4
Chloroform	1000	ND	6	ND	6.1	ND	6.4	ND
1,1,1-Trichloroethane	50000	ND	6	ND	6.1	14	6.4	ND
Cyclohexane	ND	6	ND	6.1	ND	6.4	ND	5.4
Carbon Tetrachloride	1000	ND	6	ND	6.1	ND	6.4	ND
Benzene	1000	ND	6	ND	6.1	ND	6.4	ND
1,2-Dichloroethane	ND	6	ND	6.1	ND	6.4	ND	5.4
Trichloroethene	1000	18	6	12	6.1	6600	6.4	10
1,2-Dichloropropane	ND	6	ND	6.1	ND	6.4	ND	5.4
Bromodichloromethane	ND	6	ND	6.1	ND	6.4	ND	5.4
cis-1,3-Dichloropropene	ND	6	ND	6.1	ND	6.4	ND	5.4
4-Methyl-2-Pentanone	ND	12	ND	12	ND	13	ND	11
Toluene	500000	ND	6	ND	6.1	44	6.4	ND
trans-1,3-Dichloropropene	ND	6	ND	6.1	ND	6.4	ND	5.4
1,1,2-Trichloroethane	1000	ND	6	ND	6.1	ND	6.4	ND
Tetrachloroethene	ND	6	ND	6.1	37	6.4	ND	5.4
Methylcyclohexane	ND	6	ND	6.1	ND	6.4	ND	5.4
Dibromochloromethane	ND	6	ND	6.1	ND	6.4	ND	5.4
1,2-Dibromomethane	ND	6	ND	6.1	ND	6.4	ND	5.4
2-Hexanone	ND	12	ND	12	ND	13	ND	11
Chlorobenzene	1000	ND	6	ND	6.1	8.7	6.4	ND
Ethylbenzene	ND	6	ND	6.1	25	6.4	ND	5.4
m/p-Xylene	ND	6	ND	6.1	9.6	6.4	ND	5.4
o-Xylene	ND	6	ND	6.1	200	6.4	ND	5.4
Styrene	ND	6	ND	6.1	ND	6.4	ND	5.4
Bromoform	1000	ND	6	ND	6.1	ND	6.4	ND
Isopropylbenzene	ND	6	ND	6.1	63	6.4	ND	5.4
1,1,2,2-Tetrachloroethane	1000	ND	6	ND	6.1	ND	6.4	ND
1,3-Dichlorobenzene	ND J	6	ND J	6.1	32 J	6.4	ND	5.4
1,4-Dichlorobenzene	ND	6	ND	6.1	1100	6.4	ND	5.4
1,2-Dichlorobenzene	ND	6	ND	6.1	150	6.4	ND	5.4
1,2-Dibromo-3-Chloropropane	ND	6	ND	6.1	ND	6.4	ND	5.4
1,2,4-Trichlorobenzene	ND	6	ND	6.1	38	6.4	ND	5.4
1,2,3-Trichlorobenzene	ND	6	ND	6.1	ND	6.4	ND	5.4

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 L = The reported value may be biased low.
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Table 4.
Dump Area A
Analytical Summary
TCL VOC Analysis - Mansfield Trail Dump
March 15 and 16, 2012

Sample Number:		S-135-0203-001
Sampling Location:		S-135
Matrix:	NDEP Soil	Soil
Units:		ug/kg
Date Sampled:		3/16/2012
Parameter	Conc	Result RL
Dichlorodifluoromethane		ND 9.2
Chloromethane		ND 9.2
Vinyl Chloride	10000	ND 9.2
Bromomethane	1000	ND J 9.2
Chloroethane		ND 9.2
Trichlorofluoromethane		ND 9.2
1,1-Dichloroethane		ND 9.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	1000	ND 9.2
Carbon Disulfide		ND 9.2
Acetone	100000	640 18
Methyl Acetate		ND 9.2
Methylene Chloride		ND 9.2
trans-1,2-Dichloroethane		ND 9.2
Methyl tert-Butyl Ether		ND 9.2
1,1-Dichloroethane		ND 9.2
cis-1,2-Dichloroethane		100 9.2
2-Butanone	50000	66 18
Bromochloromethane		ND 9.2
Chloroform	1000	ND 9.2
1,1,1-Trichloroethane	50000	ND 9.2
Cyclohexane		ND 9.2
Carbon Tetrachloride	1000	ND 9.2
Benzene	1000	ND 9.2
1,2-Dichloroethane	1000	ND 9.2
Trichloroethene	1000	41 9.2
1,2-Dichloropropane		ND 9.2
Bromedichloromethane		ND 9.2
cis-1,3-Dichloropropene		ND 9.2
4-Methyl-2-Pentanone		ND J 18
Toluene	500000	15 9.2
trans-1,3-Dichloropropene		ND 9.2
1,1,2-Trichloroethane	1000	ND 9.2
Tetrachloroethene		ND J 9.2
Methylcyclohexane		ND 9.2
Dibromochloromethane		ND 9.2
1,2-Dibromooethane		ND J 9.2
2-Hexanone		ND J 18
Chlorobenzene	1000	ND J 9.2
Ethylbenzene		ND J 9.2
m/p-Xylene		37 9.2
o-Xylene		54 9.2
Styrene		ND J 9.2
Bromoform	1000	ND 9.2
Isopropylbenzene		ND J 9.2
1,1,2,2-Tetrachloroethane	1000	ND J 9.2
1,3-Dichlorobenzene	100000	ND J 9.2
1,4-Dichlorobenzene	100000	160 9.2
1,2-Dichlorobenzene	50000	ND J 9.2
1,2-Dibromo-3-Chloropropane		ND J 9.2
1,2,4-Trichlorobenzene	100000	ND J 9.2
1,2,3-Trichlorobenzene		ND J 9.2

Notes:

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Table 5.
Dump Area B
Analytical Summary
TCL VOC Analysis - Mansfield Trail Dump
March 27, 2012

Sample Number:	S-136-0103-001	S-136-0103-002	S-137-0103-001	S-138-0103-001	S-139-0103-001	S-140-0103-001	S-141-0103-001	S-142-0103-001
Sampling Location:	S-136	S-136	S-137	S-138	S-139	S-140	S-141	S-142
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Date Sampled:	3/27/2012	3/27/2012	3/27/2012	3/27/2012	3/27/2012	3/27/2012	3/27/2012	3/27/2012
Parameters	Result	RL	Result	RL	Result	RL	Result	RL
Dichlorodifluoromethane	ND	6.8	ND	6.6	ND	7.4	ND	7.2
Chloromethane	ND	6.8	ND	6.6	ND	7.4	ND	7.3
Vinyl Chloride	ND	6.8	ND	6.6	ND	7.4	ND	7.3
Bromomethane	ND	6.8	ND	6.6	ND	7.4	ND	7.3
Chloroethane	ND	6.8	ND	6.6	ND	7.4	ND	7.3
Trichlorofluoromethane	ND	6.8	ND	6.6	ND	7.4	ND	7.3
1,1-Dichloroethane	ND	6.8	ND	6.6	ND	7.4	ND	7.3
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	6.8	ND	6.6	ND	7.4	ND	7.3
Carbon Disulfide	ND	6.8	ND	6.6	ND	7.4	ND	7.3
Acetone	19	14	ND	13	50	15	54	15
Methyl Acetate	ND	6.8	ND	6.6	ND	7.4	ND	7.3
Methylene Chloride	ND	6.8	ND	6.6	ND	7.4	ND	7.3
trans-1,2-Dichloroethene	ND	6.8	ND	6.6	ND	7.4	ND	7.3
Methyl tert-Butyl Ether	ND	6.8	ND	6.6	ND	7.4	ND	7.3
1,1-Dichloroethene	ND	6.8	ND	6.6	ND	7.4	ND	7.3
cis-1,2-Dichloroethene	ND	6.8	ND	6.6	ND	7.4	ND	7.3
2-Butanone	ND	14	ND	13	ND	15	ND	15
Bromochloromethane	ND	6.8	ND	6.6	ND	7.4	ND	7.3
Chloroform	ND	6.8	ND	6.6	ND	7.4	ND	7.3
1,1,1-Trichloroethane	ND	6.8	ND	6.6	ND	7.4	ND	7.3
Cyclohexane	ND	6.8	ND	6.6	ND	7.4	ND	7.3
Carbon Tetrachloride	ND	6.8	ND	6.6	ND	7.4	ND	7.3
Benzene	ND	6.8	ND	6.6	ND	7.4	ND	7.3
1,2-Dichloroethane	ND	6.8	ND	6.6	ND	7.4	ND	7.3
Trichloroethene	ND	6.8	ND	6.6	ND	7.4	ND	7.3
1,2-Dichloropropane	ND	6.8	ND	6.6	ND	7.4	ND	7.3
Bromodichloromethane	ND	6.8	ND	6.6	ND	7.4	ND	7.3
cis-1,3-Dichloropropane	ND	6.8	ND	6.6	ND	7.4	ND	7.3
4-Methyl-2-Pentanone	ND	14	ND	13	ND	15	ND	15
Toluene	ND	6.8	ND	6.6	ND	7.4	ND	7.3
trans-1,3-Dichloropropane	ND	6.8	ND	6.6	ND	7.4	ND	7.3
1,1,2-Trichloroethane	ND	6.8	ND	6.6	ND	7.4	ND	7.3
Tetrachloroethene	ND	6.8	ND	6.6	ND	7.4	ND	7.3
Methylcyclohexane	ND	6.8	ND	6.6	ND	7.4	ND	7.3
Dibromochloromethane	ND	6.8	ND	6.6	ND	7.4	ND	7.3
1,2-Dibromoethane	ND	6.8	ND	6.6	ND	7.4	ND	7.3
2-Hexanone	ND	14	ND	13	ND	15	ND	15
Chlorobenzene	ND	6.8	ND	6.6	ND	7.4	ND	7.3
Ethylbenzene	ND	6.8	ND	6.6	ND	7.4	ND	7.3
m/p-Xylene	ND	6.8	ND	6.6	ND	7.4	ND	7.3
o-Xylene	ND	6.8	ND	6.6	ND	7.4	ND	7.3
Styrene	ND	6.8	ND	6.6	ND	7.4	ND	7.3
Bromoform	ND	6.8	ND	6.6	ND	7.4	ND	7.3
Isopropylbenzene	ND	6.8	ND	6.6	ND	7.4	ND	7.3
1,1,2,2-Tetrachloroethane	ND	6.8	ND	6.6	ND	7.4	ND	7.3
1,3-Dichlorobenzene	ND	6.8	ND	6.6	ND	7.4	ND	7.3
1,4-Dichlorobenzene	6.9	6.8	9.0	6.6	ND	7.4	ND	7.3
1,2-Dichlorobenzene	ND	6.8	8.6	6.6	ND	7.4	56	7.3
1,2-Dibromo-3-Chloropropane	ND	6.8	ND	6.6	ND	7.4	ND	7.3
1,2,4-Trichlorobenzene	ND	6.8	ND	6.6	ND	7.4	ND	7.3
1,2,3-Trichlorobenzene	ND	6.8	ND	6.6	ND	7.4	ND	7.3

Notes:
 RL = Reporting Limit
 TCL = Target Compound List
 VOC = Volatile Organic Compounds
 ug/kg = micrograms per kilograms
 ND = Non detected value
 J = The reported value is an estimate.
 L = The reported value may be biased low.
 K = The reported value may be biased high.

Table 5.
Dump Area B
Analytical Summary
TCL VOC Analysis - Mansfield Trail Dump
March 27, 2012

Sample Number:	S-143-0103-001	S-144-0103-001	S-145-0103-001	S-146-0103-001	S-147-0103-001	S-148-0103-001	S-149-0103-001	S-150-0103-001
Sampling Location:	S-143	S-144	S-145	S-146	S-147	S-148	S-149	S-150
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Date Sampled:	3/27/2012	3/27/2012	3/27/2012	3/27/2012	3/27/2012	3/27/2012	3/27/2012	3/27/2012
Parameter	Result	RL	Result	RL	Result	RL	Result	RL
Dichlorodifluoromethane	ND	6.9	ND	6.3	ND	6.6	ND	6.2
Chloromethane	ND	6.9	ND	6.3	ND	6.6	ND	6.2
Vinyl Chloride	10000	ND	6.9	ND	6.3	ND	6.6	ND
Bromomethane	1000	ND	6.9	ND	6.3	ND	6.6	ND
Chloroethane	ND	6.9	ND	6.3	ND	6.6	ND	6.2
Trichlorofluoromethane	ND	6.9	ND	6.3	ND	6.6	ND	6.2
1,1-Dichloroethane	ND	6.9	ND	6.3	ND	6.6	ND	6.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	1000	ND	6.9	ND	6.3	ND	6.6	ND
Carbon Disulfide	ND	6.9	ND	6.3	ND	6.6	ND	6.2
Acetone	100000	43	14	44	13	43	15	46
Methyl Acetate	ND	6.9	ND	6.3	ND	6.6	ND	6.2
Methylene Chloride	ND	6.9	ND	6.3	ND	6.6	ND	6.2
trans-1,2-Dichloroethene	ND	6.9	ND	6.3	ND	6.6	ND	6.2
Methyl tert-Butyl Ether	ND	6.9	ND	6.3	ND	6.6	ND	6.2
1,1-Dichloroethene	ND	6.9	ND	6.3	ND	6.6	ND	6.2
cis-1,2-Dichloroethene	ND	6.9	ND	6.3	ND	6.6	ND	6.2
2-Butanone	50000	ND	14	ND	13	ND	15	ND
Bromochloromethane	ND	6.9	ND	6.3	ND	6.6	ND	6.2
Chloroform	1000	ND	6.9	ND	6.3	ND	6.6	ND
1,1,1-Trichloroethane	ND	6.9	ND	6.3	ND	6.6	ND	6.2
Cyclohexane	ND	6.9	ND	6.3	ND	6.6	ND	6.2
Carbon Tetrachloride	1000	ND	6.9	ND	6.3	ND	6.6	ND
Benzene	1000	ND	6.9	ND	6.3	ND	6.6	ND
1,2-Dichloroethane	1000	ND	6.9	ND	6.3	ND	6.6	ND
Trichloroethene	1000	ND	6.9	ND	6.3	ND	6.6	ND
1,2-Dichloropropane	ND	6.9	ND	6.3	ND	6.6	ND	6.2
Bromodichloromethane	ND	6.9	ND	6.3	ND	6.6	ND	6.2
cis-1,3-Dichloropropene	ND	6.9	ND	6.3	ND	6.6	ND	6.2
4-Methyl-2-Pentanone	ND	14	ND	13	ND	15	ND	10
Toluene	500000	ND	6.9	ND	6.3	ND	6.6	ND
trans-1,3-Dichloropropene	ND	6.9	ND	6.3	ND	6.6	ND	6.2
1,1,2-Trichloroethane	1000	ND	6.9	ND	6.3	ND	6.6	ND
Tetrachloroethene	ND	6.9	ND	6.3	ND	6.6	ND	6.2
Methylcyclohexane	ND	6.9	ND	6.3	ND	6.6	ND	6.2
Dibromochloromethane	ND	6.9	ND	6.3	ND	6.6	ND	6.2
1,2-Dibromoethane	ND	6.9	ND	6.3	ND	6.6	ND	6.2
2-Hexanone	ND	14	ND	13	ND	15	ND	10
Chlorobenzene	1000	ND	6.9	ND	6.3	ND	6.6	ND
Ethylbenzene	ND	6.9	ND	6.3	ND	6.6	ND	6.2
m/p-Xylene	ND	6.9	ND	6.3	ND	6.6	ND	6.2
o-Xylene	ND	6.9	ND	6.3	ND	6.6	ND	6.2
Styrene	ND	6.9	ND	6.3	ND	6.6	ND	6.2
Bromoform	1000	ND	6.9	ND	6.3	ND	6.6	ND
Isopropylbenzene	ND	6.9	ND	6.3	ND	6.6	ND	6.2
1,1,2,2-Tetrachloroethane	ND	6.9	ND	6.3	ND	6.6	ND	6.2
1,3-Dichlorobenzene	100000	ND	6.9	ND	6.3	ND	6.6	ND
1,4-Dichlorobenzene	100000	9.8	6.9	10	6.3	69	6.6	ND
1,2-Dichlorobenzene	50000	75	6.9	71	6.3	1800	300	12
1,2-Dibromo-3-Chloropropane	ND	6.9	ND	6.3	ND	6.6	ND	6.2
1,2,4-Trichlorobenzene	100000	ND	6.9	ND	6.3	ND	6.6	ND
1,2,3-Trichlorobenzene	ND	6.9	ND	6.3	ND	6.6	ND	6.2

Notes:

RL = Reporting Limit
TCL = Target Compound List
VOC = Volatile Organic Compounds
ug/kg = micrograms per kilograms
ND = Non detected value
J = The reported value is an estimate.
L = The reported value may be biased low.
K = The reported value may be biased high.

Table 5.
Dump Area B
Analytical Summary
TCL VOC Analysis - Mansfield Trail Dump
March 27, 2012

Sample Number:	S-151-0103-001	S-152-0103-001	S-153-0103-001	S-154-0103-001	S-155-0103-001
Sampling Location:	S-151	S-152	S-153	S-154	S-155
Matrix:	Soil	Soil	Soil	Soil	Soil
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Date Sampled:	3/27/2012	3/27/2012	3/27/2012	3/27/2012	3/27/2012
Parameter:	Result	RL	Result	RL	Result
Dichlorodifluoromethane	ND	6.0	ND	6.0	ND
Chloromethane	ND	6.0	ND	6.0	ND
Vinyl Chloride	ND	6.0	ND	6.0	ND
Bromomethane	ND	6.0	ND	6.0	ND
Chloroethane	ND	6.0	ND	6.0	ND
Trichlorofluoromethane	ND	6.0	ND	6.0	ND
1,1-Dichloroethane	ND	6.0	ND	6.0	ND
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	6.0	ND	6.0	ND
Carbon Disulfide	ND	6.0	ND	6.0	ND
Acetone	38	12	84	12	80
Methyl Acetate	ND	6.0	ND	6.0	ND
Methylene Chloride	ND	6.0	ND	6.0	ND
trans-1,2-Dichloroethene	ND	6.0	ND	6.0	ND
Methyl tert-Butyl Ether	ND	6.0	ND	6.0	ND
1,1-Dichloroethene	ND	6.0	ND	6.0	ND
cis-1,2-Dichloroethene	ND	6.0	ND	6.0	ND
2-Butanone	ND	12	ND	12	ND
Bromochloromethane	ND	6.0	ND	6.0	ND
Chloroform	ND	6.0	ND	6.0	ND
1,1,1-Trichloroethane	ND	6.0	ND	6.0	ND
Cyclohexane	ND	6.0	ND	6.0	ND
Carbon Tetrachloride	ND	6.0	ND	6.0	ND
Benzene	ND	6.0	ND	6.0	ND
1,2-Dichloroethane	ND	6.0	ND	6.0	ND
Trichloroethene	ND	6.0	ND	6.0	ND
1,2-Dichloropropane	ND	6.0	ND	6.0	ND
Bromodichloromethane	ND	6.0	ND	6.0	ND
cis-1,3-Dichloropropene	ND	6.0	ND	6.0	ND
4-Methyl-2-Pentanone	ND	12	ND	12	ND
Toluene	ND	6.0	ND	6.0	ND
trans-1,3-Dichloropropene	ND	6.0	ND	6.0	ND
1,1,2-Trichloroethane	ND	6.0	ND	6.0	ND
Tetrachloroethene	ND	6.0	ND	6.0	ND
Methylcyclohexane	ND	6.0	ND	6.0	ND
Dibromochloromethane	ND	6.0	ND	6.0	ND
1,2-Dibromoethane	ND	6.0	ND	6.0	ND
2-Hexanone	ND	12	ND	12.0	ND
Chlorobenzene	ND	6.0	ND	6.0	ND
Ethylbenzene	ND	6.0	ND	6.0	ND
m,p-Xylene	ND	6.0	ND	6.0	ND
o-Xylene	ND	6.0	ND	6.0	ND
Styrene	ND	6.0	ND	6.0	ND
Bromoform	ND	6.0	ND	6.0	ND
Isopropylbenzene	ND	6.0	ND	6.0	ND
1,1,2,2-Tetrachloroethane	ND	6.0	ND	6.0	ND
1,3-Dichlorobenzene	ND	6.0	ND	6.0	ND
1,4-Dichlorobenzene	ND	6.0	ND	6.0	ND
1,2-Dichlorobenzene	ND	6.0	20	6.0	58
1,2-Dibromo-3-Chloropropane	ND	6.0	ND	6.0	ND
1,2,4-Trichlorobenzene	ND	6.0	ND	6.0	ND
1,2,3-Trichlorobenzene	ND	6.0	ND	6.0	ND

Notes:
 RL = Reporting Limit
 TCL = Target Compound List
 VOC = Volatile Organic Compounds
 ug/kg = micrograms per kilograms
 ND = Non detected value
 J = The reported value is an estimate.
 L = The reported value may be biased low.
 K = The reported value may be biased high.

Table 6.
Dump Area D Trench 4
Analytical Summary
TCL VOC Analysis - Mansfield Trail Dump
March 28, 2012

Sample Number:	S-156-0103-001	S-157-2425-001	S-157-2425-002	S-158-2425-001	S-159-2425-001	S-160-2425-001
Sampling Location:	NIDEP	NIDEP	NIDEP	NIDEP	NIDEP	NIDEP
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Unit:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Date Sampled:	3/28/2012	3/28/2012	3/28/2012	3/28/2012	3/28/2012	3/28/2012
Parameter	Result	RL	Result	RL	Result	RL
Dichlorodifluoromethane	ND	7.6	ND	6.0	ND	5.6
Chloromethane	ND	7.6	ND	6.0	ND	5.6
Vinyl Chloride	10000	ND	7.6	ND	6.0	ND
Bromomethane	1000	ND J	7.6	ND J	6.0	ND J
Chloroethane	ND	7.6	ND	6.0	ND	5.6
Trichlorofluoromethane	ND	7.6	ND	6.0	ND	5.6
1,1-Dichloroethene	ND	7.6	ND	6.0	ND	5.6
1,1,2-Trichloro-1,2,2-Trifluoroethane	1000	ND	7.6	ND	6.0	ND
Carbon Disulfide	ND	7.6	ND	6.0	ND	5.6
Acetone	100000	ND J	15	ND J	12.0	ND J
Methyl Acetate	ND	7.6	ND J	6.0	ND J	5.6
Methylene Chloride	ND	7.6	ND	6.0	ND	5.6
trans-1,2-Dichloroethene	ND	7.6	ND	6.0	ND	5.6
Methyl tert-Butyl Ether	ND J	7.6	ND	6.0	ND J	5.6
1,1-Dichloroethane	ND	7.6	ND	6.0	ND	5.6
cis-1,2-Dichloroethene	ND	7.6	ND	6.0	ND	5.6
2-Butanone	50000	ND J	15	ND J	12.0	ND J
Bromodichloromethane	ND	7.6	ND	6.0	ND	5.6
Chloroform	1000	ND	7.6	ND	6.0	ND
1,1,1-Trichloroethane	50000	ND	7.6	ND	6.0	ND
Cyclohexane	ND	7.6	ND	6.0	ND	5.6
Carbon Tetrachloride	1000	ND	7.6	ND	6.0	ND
Benzene	1000	ND	7.6	ND	6.0	ND
1,2-Dichloroethane	1000	ND	7.6	ND	6.0	ND
Trichloroethene	1000	ND	7.6	ND	6.0	ND
1,2-Dichloropropane	ND	7.6	ND	6.0	ND	5.6
Bromodichloroethane	ND	7.6	ND	6.0	ND	5.6
cis-1,3-Dichloropropene	ND	7.6	ND	6.0	ND	5.6
4-Methyl-2-Pentanone	ND J	15	ND J	12.0	ND J	11
Toluene	500000	ND	7.6	ND	6.0	ND
trans-1,3-Dichloropropene	ND	7.6	ND	6.0	ND	5.6
1,1,2-Trichloroethane	1000	ND	7.6	ND	6.0	ND
Tetrachloroethene	ND	7.6	ND	6.0	ND	5.6
Methylcyclohexane	ND	7.6	ND	6.0	ND	5.6
Dibromochloromethane	ND	7.6	ND	6.0	ND	5.6
1,2-Dibromoethane	ND	7.6	ND	6.0	ND	5.6
2-Hexanone	ND	15	ND	12.0	ND	11
Chlorobenzene	1000	ND	7.6	ND	6.0	ND
Ethylbenzene	ND	7.6	ND	6.0	ND	5.6
m/p-Xylene	ND	7.6	ND	6.0	ND	5.6
o-Xylene	ND	7.6	ND	6.0	ND	5.6
Styrene	ND	7.6	ND L	6.0	ND	5.6
Bromoform	1000	ND	7.6	ND	6.0	ND
Isopropylbenzene	ND	7.6	ND	6.0	ND	5.6
1,1,2,2-Tetrachloroethane	1000	ND	7.6	ND	6.0	ND
1,3-Dichlorobenzene	100000	ND	7.6	ND	6.0	ND
1,4-Dichlorobenzene	100000	ND	7.6	ND	6.0	ND
1,2-Dichlorobenzene	50000	ND	7.6	ND	6.0	ND
1,2-Dibromo-3-Chloropropane	ND	7.6	ND	6.0	ND	5.6
1,2,4-Trichlorobenzene	100000	ND	7.6	ND	6.0	ND
1,2,3-Trichlorobenzene	ND	7.6	ND	6.0	ND	5.6

Notes:
 RL = Reporting Limit
 TCL = Target Compound List
 VOC = Volatile Organic Compounds
 ug/kg = micrograms per kilograms
 ND = Non detected value
 J = The reported value is an estimate.
 L = The reported value may be biased low.
 K = The reported value may be biased high.

Table 6.
Dump Area D Trench 4
Analytical Summary
TCL VOC Analysis - Mmsfield Trail Dump
March 28, 2012

Sample Number:	S-161-1617-001	S-162-3637-001	S-163-3637-001	S-164-3637-001	S-165-3637-001						
Sampling Location:	S-161	S-162	S-163	S-164	S-165						
Matrix:	Soil	Soil	Soil	Soil	Soil						
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg						
Date Sampled:	3/28/2012	3/28/2012	3/28/2012	3/28/2012	3/28/2012						
Parameter	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	
Dichlorodifluoromethane	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
Chloromethane	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
Vinyl Chloride	10000	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
Bromomethane	1000	ND J	6.5	ND J	7.2	ND J	6.3	ND J	6.0	ND J	6.0
Chloroethane	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
Trichlorofluoromethane	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
1,1-Dichloroethene	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	1000	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
Carbon Disulfide	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
Acetone	100000	70 J	13	87	14	79	13	32	12.0	16	12.0
Methyl Acetate	ND J	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
Methylene Chloride	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
trans-1,2-Dichloroethene	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
Methyl tert-Butyl Ether	ND J	6.5	ND J	7.2	ND J	6.3	ND J	6.0	ND J	6.0	
1,1-Dichloroethane	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
cis-1,2-Dichloroethene	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
2-Butanone	50000	ND J	13	ND	14	ND	13	ND	12.0	ND	12.0
Bromodichloromethane	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
Chloroform	1000	ND	6.5	ND	7.2	79	6.3	32	6.0	ND	6.0
1,1,1-Trichloroethane	50000	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
Cyclohexane	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
Carbon Tetrachloride	1000	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
Benzene	1000	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
1,2-Dichloroethane	1000	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
Trichloroethene	1000	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
1,2-Dichloropropane	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
Bromodichloromethane	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
cis-1,3-Dichloropropene	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
4-Methyl-2-Pentanone	ND J	13	ND	7.2	ND	13	ND	12.0	ND	12.0	
Toluene	500000	ND	6.5	ND	14	ND	6.3	ND	6.0	ND	6.0
trans-1,3-Dichloropropene	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
1,1,2-Trichloroethane	1000	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
Tetrachloroethene	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
Methylcyclohexane	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
Dibromochloromethane	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
1,2-Dibromoethane	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
2-Hexanone	ND	13	ND	7.2	ND	13	ND	12.0	ND	12.0	
Chlorobenzene	1000	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
Ethylbenzene	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
m/p-Xylene	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
o-Xylene	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
Styrene	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
Bromoform	1000	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
Isopropylbenzene	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
1,1,2,2-Tetrachloroethane	1000	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
1,3-Dichlorobenzene	100000	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
1,4-Dichlorobenzene	100000	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
1,2-Dichlorobenzene	50000	ND	6.5	ND	7.2	6.7	6.3	ND	6.0	ND	6.0
1,2-Dibromo-3-Chloropropane	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	
1,2,4-Trichlorobenzene	100000	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0
1,2,3-Trichlorobenzene	ND	6.5	ND	7.2	ND	6.3	ND	6.0	ND	6.0	

Notes:
 RL = Reporting Limit
 TCL = Target Compound List
 VOC = Volatile Organic Compounds
 ug/kg = micrograms per kilograms
 ND = Non detected value
 J = The reported value is an estimate.
 L = The reported value may be biased low.
 K = The reported value may be biased high.

Table 7
2010 Assessment Soil Sample Summary
Selected Samples from Dump Area D
May-June 2010

Boring Location	Centerline Refusal Depth (ft bgs)	Sample Number	Organic CLP No.	Date	Sample Depth (ft bgs)	TVA-1008 Screening Results (units above background)		Soil Description	References
						FID	FID		
D28	4*	0860-D-S28	B7H68	6/10/2010	1.6-1.8	N/A	N/A	Yellowish-orange fine to coarse sand, little gravel, dry	Ref. 2, p. 100; 48, p. 8; 66, p. 34.
D29	3.5*	0860-D-S29	B7H69	6/15/2010	1.6-1.8	N/A	N/A	Dark to light brown silt and fine to coarse sand, little gravel, dry	Ref. 2, p. 110; 48, p. 8; 66, p. 33.
D37	11	0860-D-S37	B7H03	6/14/2010	1.6-1.8	0.69	0.28	Light brown to orange-yellow clay and silt, some coarse sand, trace gravel	Ref. 2, p. 107; 48, pp. 8-9; 57, p. 7; 66, pp. 42-44.
		0860-D-SS37A	B7H04	6/14/2010	6.9-7.1	0.59	0.43	Orange-yellow silt and fine sand, little clay	
		0860-D-SS37B	B7H05	6/14/2010	10.7-10.9	0.49	0.03	Light brown to orange fine to medium sand, trace fine gravel	
D40	2	0860-D-S40	B7H12	5/11/2010	1.5-1.8	0	0	Brown medium to fine sand, some rocks, trace clay, loose	Ref. 48, p. 9; 51, p. 7; 57, p. 3; 66, p. 47.
D45	4	0860-D-S45	B7H36	5/11/2010	1.5-1.8	0.5	0	Brown medium to fine sand with rocks, trace clay, loose	Ref. 2, p. 67; 48, pp. 9-10; 57, p. 3; 66, p. 57.
		0860-D-SS45A	B7H40	5/11/2010	3.5-4.0	0	0	Brown medium to fine sand with rocks, trace clay, loose	
D46	1.5	0860-D-S46	B7H37	5/11/2010	1.5-1.8	0	0	Brown medium to fine sand with loose rocks	Ref. 2, p. 67; 48, p. 10; 57, p. 3; 66, p. 58.
D47	3*	0860-D-S47	B7H38	5/11/2010	1.5-1.8	0	0	Orange-brown medium to fine sand, loose, moist	Ref. 2, p. 67; 48, p. 10; 57, p. 3; 66, p. 59.
D48	5.5	0860-D-S48	B7H39	5/11/2010	1.5-1.8	1.2	0	Brownish-orange medium to fine sand, some rocks fragments, loose	Ref. 48, p. 10; 51, p. 7; 57, p. 3; 66, p. 60.
		0860-D-SS48A	B7H42	5/11/2010	5.0-5.3	1.9	0	Brownish-orange medium to fine sand, some rocks fragments, loose	
D53	9	0860-D-S53	B7H79	6/15/2010	0.4-0.6	44.44	166.5	Black tar-like material	Ref. 2, p. 109; 48, pp. 10-11; 57, p. 8; 66, pp. 69-70.
		0860-D-SS53A	B7HB1	6/15/2010	6.8-7.1	1.92	3.36	Light brown to black to yellowish-orange fine to coarse sand	

ft bgs = Feet below ground surface.

* Denotes depth of the deepest co-located boring (due to shallow refusal and/or low recovery).

PID = Photoionization detector.

FID = Flame ionization detector.

N/A = Not applicable, sample collected by hand or not analyzed.

Table 8
Mansfield Trail Dump - Waste Source Delineation Phase
Soil Sampling Results - Target Compound List Volatile Organic Compounds
May-June 2010

WESTON Sample No.	0860-D-S53	0860-D-S53A	0860-D-S28	0860-D-S29	0860-D-S537B	0860-D-S40	0860-D-S545A	0860-D-S45	0860-D-S47	0860-D-S48
EPA Sample No.	B7H79	B7H81	B7H89	B7H89	B7H95	B7H12	B7H40	B7H37	B7H38	B7H39
Comment:										
Dichlorodifluoromethane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Chloromethane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Vinyl chloride	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Bromomethane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Chloroethane [a.k.a. Ethyl chloride]	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Trichlorofluoromethane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
1,1-Dichloroethylene	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Acetone	11,000 U	27	9.9 U	12 U	11 U	12 U	11 U	13 U	12 U	11 U
Carbon disulfide	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Methyl acetate	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Methylene chloride	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
trans-1,2-Dichloroethylene	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Methyl tert-butyl ether	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
1,1-Dichloroethane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
cis-1,2-Dichloroethylene	5,400 U	35	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
2-Butanone [a.k.a. Methyl ethyl ketone]	11,000 U	9	9.9 U	12 U	11 U	12 U	11 U	13 U	12 U	11 U
Bromochloromethane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Chloroform	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
1,1,1-Trichloroethane	5,400 U	56	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Cyclohexane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Carbon tetrachloride	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Benzene	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
1,2-Dichloroethane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
1,4-Dioxane	110,000 R	90 R	99 R	120 R	110 R	120 R	110 R	130 R	120 R	110 R
Trichloroethylene	5,400 U	47	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Methylcyclohexane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
1,2-Dichloropropane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Bromodichloromethane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
cis-1,3-Dichloropropene	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
4-Methyl-2-pentanone [a.k.a. Methyl isobutyl ketone]	11,000 U	9 U	9.9 U	12 U	11 U	12 U	11 U	13 U	12 U	11 U
Toluene	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
trans-1,3-Dichloropropene	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
1,1,2-Trichloroethane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Tetrachloroethylene	5,400 U	55	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
2-Hexanone	11,000 U	9 U	9.9 U	12 U	11 U	12 U	11 U	13 U	12 U	11 U
Dibromochloromethane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
1,2-Dibromochloromethane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Chlorobenzene	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Ethylbenzene	100,000	4.9 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
p-Xylene	37,000	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
m,p-Xylene	150,000	4.9 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Styrene	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Bromoform	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
Isopropylbenzene [a.k.a. Cumene]	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
1,1,2,2-Tetrachloroethane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
1,3-Dichlorobenzene	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
1,4-Dichlorobenzene	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
1,2-Dichlorobenzene	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
1,2-Dibromo-3-chloropropane	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
1,2,4-Trichlorobenzene	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
1,2,3-Trichlorobenzene	5,400 U	4.5 U	4.9 U	6.2 U	5.5 U	6.2 U	5.5 U	6.5 U	6.1 U	5.3 U
References	Ref. 48, p. 52-49, pp. 230, 242; 51, p. 22	Ref. 48, p. 53-49, pp. 235, 247; 51, p. 22	Ref. 48, p. 50-48, p. 37; 49, p. 410	Ref. 48, p. 52-49, p. 327; 51, p. 22	Ref. 48, p. 47-49, p. 224; 51, p. 20-31	Ref. 48, p. 18; 49, p. 16; 51, p. 7	Ref. 48, p. 18; 49, p. 22; 51, p. 7	Ref. 48, p. 18; 49, p. 16; 51, p. 7	Ref. 48, p. 18; 49, p. 20; 51, p. 8	Ref. 48, p. 18; 49, p. 21; 51, p. 8

All results in micrograms per kilogram (µg/kg).
 U = The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the
 UJ = The analyte was not detected at a level greater than or equal to the adjusted CROL. However, the
 R = The sample results are unusable due to the quality of the data generated because carbon criteria were not met. The analyte may or may not be present in the sample [Ref. 35, p. 6].

Attachment B-3:

Chain of Custody Records

Removal Action Section

Weston Solutions, Inc., Edison, NJ

EPA Contract Number: EP-W-06-072

CHAIN OF CUSTODY RECORD

Mansfield Trail Dump

Contact Name: Brittney Kelly

Contact Phone: 908-665-2975

No: 2-031212-182347-0001

Date Shipped:

Lab: EPA DESA Laboratories

732-906-6886

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
1203018-01	S-041-0210-001	S-041	Soil Moisture	Soil	3/12/2012	13:30	1	4 oz glass jar	4 C	Y
-01	S-041-0210-001	S-041	TCL VOCs	Soil	3/12/2012	13:30	12	5 g Encore	4 C	Y
-02	S-041-0210-002	S-041	TCL VOCs	Soil	3/12/2012	13:30	4	5 g Encore	4 C	N
-02	S-041-0210-002	S-041	Soil Moisture	Soil	3/12/2012	13:30	1	4 oz glass jar	4 C	N
-03	S-042-0207-001	S-042	TCL VOCs	Soil	3/12/2012	13:45	4	5 g Encore	4 C	N
-03	S-042-0207-001	S-042	Soil Moisture	Soil	3/12/2012	13:45	1	4 oz glass jar	4 C	N
-04	S-043-0212-001	S-043	TCL VOCs	Soil	3/12/2012	13:50	4	5 g Encore	4 C	N
-04	S-043-0212-001	S-043	Soil Moisture	Soil	3/12/2012	13:50	1	4 oz glass jar	4 C	N
-05	S-044-0207-001	S-044	Soil Moisture	Soil	3/12/2012	13:58	1	4 oz glass jar	4 C	N
-05	S-044-0207-001	S-044	TCL VOCs	Soil	3/12/2012	13:58	4	5 g Encore	4 C	N
-06	S-045-0207-001	S-045	Soil Moisture	Soil	3/12/2012	14:04	1	4 oz glass jar	4 C	N
-06	S-045-0207-001	S-045	TCL VOCs	Soil	3/12/2012	14:04	4	5 g Encore	4 C	N
-07	S-046-0208-001	S-046	TCL VOCs	Soil	3/12/2012	14:12	4	5 g Encore	4 C	N
-07	S-046-0208-001	S-046	Soil Moisture	Soil	3/12/2012	14:12	1	4 oz glass jar	4 C	N
-08	S-047-0207-001	S-047	TCL VOCs	Soil	3/12/2012	14:20	4	5 g Encore	4 C	N
-08	S-047-0207-001	S-047	Soil Moisture	Soil	3/12/2012	14:20	1	4 oz glass jar	4 C	N
-09	S-048-0207-001	S-048	TCL VOCs	Soil	3/12/2012	14:27	4	5 g Encore	4 C	N
-09	S-048-0207-001	S-048	Soil Moisture	Soil	3/12/2012	14:27	1	4 oz glass jar	4 C	N
-10	S-049-0207-001	S-049	TCL VOCs	Soil	3/12/2012	14:35	4	5 g Encore	4 C	N

* Not Collected Same Location as S-041-0210-001
Special Instructions: TAT 7 days

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
ALL SAMPLES Analysis	<i>[Signature]</i>	3/12/12	<i>[Signature]</i>	3/12/12	1730						
11	<i>[Signature]</i>	3/12/12	WALK-IN at DESA	3/12/12	1850						
			<i>[Signature]</i>	3/12/12	9:00 AM						

Temp = 7.8°C on ice 3/13/12

EPA Contract Number: EP-W-08-072

CHAIN OF CUSTODY RECORD

Mansfield Trail Dump

Contact Name: Brittney Kelly

Contact Phone: 908-685-2975

No: 2-031212-182347-0001

Date Shipped:

Lab: EPA DESA Laboratories

732-906-6886

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
10	S-049-0207-001	S-049	Soil Moisture	Soil	3/12/2012	14:35	1	4 oz glass jar	4 C	N
11	S-050-0209-001	S-050	Soil Moisture	Soil	3/12/2012	14:42	1	4 oz glass jar	4 C	N
11	S-050-0209-001	S-050	TCL VOCs	Soil	3/12/2012	14:42	4	5 g Encore	4 C	N
12	S-051-0208-001	S-051	TCL VOCs	Soil	3/12/2012	14:50	4	5 g Encore	4 C	N
12	S-051-0208-001	S-051	Soil Moisture	Soil	3/12/2012	14:50	1	4 oz glass jar	4 C	N
13	S-052-0210-001	S-052	TCL VOCs	Soil	3/12/2012	14:58	4	5 g Encore	4 C	N
13	S-052-0210-001	S-052	Soil Moisture	Soil	3/12/2012	14:58	1	4 oz glass jar	4 C	N
14	S-053-0210-001	S-053	Soil Moisture	Soil	3/12/2012	15:07	1	4 oz glass jar	4 C	N
14	S-053-0210-001	S-053	TCL VOCs	Soil	3/12/2012	15:07	4	5 g Encore	4 C	N
15	S-054-0210-001	S-054	TCL VOCs	Soil	3/12/2012	15:15	4	5 g Encore	4 C	N
15	S-054-0210-001	S-054	Soil Moisture	Soil	3/12/2012	15:15	1	4 oz glass jar	4 C	N
16	S-055-0209-001	S-055	Soil Moisture	Soil	3/12/2012	15:23	1	4 oz glass jar	4 C	N
16	S-055-0209-001	S-055	TCL VOCs	Soil	3/12/2012	15:23	4	5 g Encore	4 C	N
17	S-056-0208-001	S-056	TCL VOCs	Soil	3/12/2012	15:30	4	5 g Encore	4 C	N
17	S-056-0208-001	S-056	Soil Moisture	Soil	3/12/2012	15:30	1	4 oz glass jar	4 C	N
18	S-057-0207-001	S-057	TCL VOCs	Soil	3/12/2012	15:42	4	5 g Encore	4 C	N
18	S-057-0207-001	S-057	Soil Moisture	Soil	3/12/2012	15:42	1	4 oz glass jar	4 C	N
19	S-058-0209-001	S-058	TCL VOCs	Soil	3/12/2012	15:58	4	5 g Encore	4 C	N
19	S-058-0209-001	S-058	Soil Moisture	Soil	3/12/2012	15:58	1	4 oz glass jar	4 C	N

20
3/13/12

Special instructions: TAT 7 days

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

[illegible]

Mansfield Trail Dump
Contact Name: Brittney Kelly
Contact Phone: 908-665-2975

Date Shipped:
Lab: EPA DESA Laboratories
732-906-6886

[illegible]

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

[illegible]

Removal Action Section
Weston Solutions, Inc.
1090 King Georges Post Rd
Edison, NJ 08837

CHAIN OF CUSTODY RECORD

Site: Mansfield Trail Dump
Contact Name: Brittney Kelly
Contact Phone: 908-565-2975

No: 2-031312-175367-0003

Date Shipped: 3/13/2012
Lab: EPA DESA Laboratories
732-906-6886

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
1203019-21	RB-031312-001	Outside Site Trailer	TCL VOCs <i>K</i>	Water	3/13/2012	15:00	1	VOA	4 C	N
1203019-01	S-060-0206-001	S-060	TCL VOCs	Soil	3/13/2012	12:55	12	5 g Encore	4 C	Y
-01	S-060-0206-001	S-060	Soil Moisture	Soil	3/13/2012	12:55	1	4 oz glass jar	4 C	Y
-02	S-060-0206-002	S-060	TCL VOCs	Soil	3/13/2012	12:58	4	5 g Encore	4 C	N
-02	S-060-0206-002	S-060	Soil Moisture	Soil	3/13/2012	12:58	1	4 oz glass jar	4 C	N
-03	S-061-0210-001	S-060	TCL VOCs	Soil	3/13/2012	14:15	4	5 g Encore	4 C	N
-03	S-061-0210-001	S-060	Soil Moisture	Soil	3/13/2012	14:15	1	4 oz glass jar	4 C	N
-04	S-062-0212-001	S-062	TCL VOCs	Soil	3/13/2012	12:10	4	5 g Encore	4 C	N
-04	S-062-0212-001	S-062	Soil Moisture	Soil	3/13/2012	12:10	1	4 oz glass jar	4 C	N
-05	S-063-0212-001	S-063	TCL VOCs	Soil	3/13/2012	12:26	4	5 g Encore	4 C	N
-05	S-063-0212-001	S-063	Soil Moisture	Soil	3/13/2012	12:26	1	4 oz glass jar	4 C	N
-06	S-064-0216-001	S-064	TCL VOCs	Soil	3/13/2012	13:42	4	5 g Encore	4 C	N
-06	S-064-0216-001	S-064	Soil Moisture	Soil	3/13/2012	13:42	1	4 oz glass jar	4 C	N
-07	S-065-0208-001	S-065	TCL VOCs	Soil	3/13/2012	13:50	4	5 g Encore	4 C	N
-07	S-065-0208-001	S-065	Soil Moisture	Soil	3/13/2012	13:50	1	4 oz glass jar	4 C	N
-08	S-066-0206-001	S-066	TCL VOCs	Soil	3/13/2012	11:35	4	5 g Encore	4 C	N
-08	S-066-0206-001	S-066	Soil Moisture	Soil	3/13/2012	11:35	1	4 oz glass jar	4 C	N
-09	S-067-0206-001	S-067	TCL VOCs	Soil	3/13/2012	11:25	4	5 g Encore	4 C	N
-09	S-067-0206-001	S-067	Soil Moisture	Soil	3/13/2012	11:25	1	4 oz glass jar	4 C	N

Lab rec'd 1-voc vial with head space + not preserved. 3/14/12

Special Instructions: TAT7 days

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All Sample Analysis	<i>BA</i>	3/13/12	<i>[Signature]</i>	3/14/12	18:50						
1114	<i>[Signature]</i>	3/14/12	<i>[Signature]</i>	3/14/12	7:20 AM						

Hand Delivered, Temp = 5.3 on ice 3/14/12 *BA*

Site: Mansfield Trail Dump
Contact Name: Brittney Kelly
Contact Phone: 908-565-2975

Date Shipped: 3/13/2012
Lab: EPA DESA Laboratories
732-906-6886

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
09-10	S-068-0208-001	S-068	TCL VOCs	Soil	3/13/2012	11:48	4	5 g Encore	4 C	N
-10	S-068-0208-001	S-068	Soil Moisture	Soil	3/13/2012	11:48	1	4 oz glass jar	4 C	N
-11	S-069-0212-001	S-069	TCL VOCs	Soil	3/13/2012	12:40	4	5 g Encore	4 C	N
-11	S-069-0212-001	S-069	Soil Moisture	Soil	3/13/2012	12:40	1	4 oz glass jar	4 C	N
-12	S-070-0208-001	S-070	TCL VOCs	Soil	3/13/2012	14:36	4	5 g Encore	4 C	N
-12	S-070-0208-001	S-070	Soil Moisture	Soil	3/13/2012	14:36	1	4 oz glass jar	4 C	N
-13	S-071-0210-001	S-071	TCL VOCs	Soil	3/13/2012	14:30	4	5 g Encore	4 C	N
-13	S-071-0210-001	S-071	Soil Moisture	Soil	3/13/2012	14:30	1	4 oz glass jar	4 C	N
-14	S-072-0208-001	S-072	TCL VOCs	Soil	3/13/2012	13:10	4	5 g Encore	4 C	N
-14	S-072-0208-001	S-072	Soil Moisture	Soil	3/13/2012	13:10	1	4 oz glass jar	4 C	N
-15	S-073-0104-001	S-073	TCL VOCs	Soil	3/13/2012	12:30	4	5 g Encore	4 C	N
-15	S-073-0104-001	S-073	Soil Moisture	Soil	3/13/2012	12:30	1	4 oz glass jar	4 C	N
-16	S-074-0408-001	S-074	TCL VOCs	Soil	3/13/2012	12:20	4	5 g Encore	4 C	N
-16	S-074-0408-001	S-074	Soil Moisture	Soil	3/13/2012	12:20	1	4 oz glass jar	4 C	N
-17	S-075-0210-001	S-075	TCL VOCs	Soil	3/13/2012	13:20	4	5 g Encore	4 C	N
-17	S-075-0210-001	S-075	Soil Moisture	Soil	3/13/2012	13:20	1	4 oz glass jar	4 C	N
-18	S-076-0208-001	S-076	TCL VOCs	Soil	3/13/2012	13:29	4	5 g Encore	4 C	N
-18	S-076-0208-001	S-076	Soil Moisture	Soil	3/13/2012	13:29	1	4 oz glass jar	4 C	N
-19	S-077-0207-001	S-077	TCL VOCs	Soil	3/13/2012	13:36	4	5 g Encore	4 C	N

3/14/12

Special Instructions: TAT 7 days

SAMPLES TRANSFERRED FROM	
CHAIN OF CUSTODY #	

[illegible]

Site: Mansfield Trail Dump
Contact Name: Brittney Kelly
Contact Phone: 908-565-2976

Date Shipped: 3/13/2012
Lab: EPA DESA Laboratories
732-806-6886

[illegible]

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

[illegible]

Site: Mansfield Trail Dump
Contact Name: Brittney Kely
Contact Phone: 908-565-2975

Date Shipped:
Lab: EPA DESA Laboratories
732-908-6888

Lab #	Sample #	Location	Analyses	Time	Matrix	Collected	Numb Cont	Container	Preservative	MS/MSD
22-20	RB-031412-001	Outside Site Trailer	TCL VOCs *	12:45	Water	3/14/2012	1	VOA	4 C	N
22-01	S-079-0207-001	S-079	TCL VOCs	11:50	Soil	3/14/2012	12	5 g Encore	4 C	Y
-01	S-079-0207-001	S-079	Soil Moisture	11:50	Soil	3/14/2012	1	4 oz glass jar	4 C	N
-02	S-079-0207-002	S-079	TCL VOCs	11:50	Soil	3/14/2012	4	5 g Encore	4 C	N
-03	S-080-0212-001	S-080	TCL VOCs	9:15	Soil	3/14/2012	4	5 g Encore	4 C	N
-03	S-080-0212-001	S-080	Soil Moisture	9:15	Soil	3/14/2012	1	4 oz glass jar	4 C	N
-04	S-081-0208-001	S-081	TCL VOCs	10:47	Soil	3/14/2012	4	5 g Encore	4 C	N
-04	S-081-0208-001	S-081	Soil Moisture	10:47	Soil	3/14/2012	1	4 oz glass jar	4 C	N
-05	S-082-0212-001	S-082	TCL VOCs	9:20	Soil	3/14/2012	4	5 g Encore	4 C	N
-05	S-082-0212-001	S-082	Soil Moisture	9:20	Soil	3/14/2012	1	4 oz glass jar	4 C	N
-06	S-083-0210-001	S-083	TCL VOCs	12:08	Soil	3/14/2012	4	5 g Encore	4 C	N
-06	S-083-0210-001	S-083	Soil Moisture	12:08	Soil	3/14/2012	1	4 oz glass jar	4 C	N
-07	S-084-0211-001	S-084	TCL VOCs	10:33	Soil	3/14/2012	4	5 g Encore	4 C	N
-07	S-084-0211-001	S-084	Soil Moisture	10:33	Soil	3/14/2012	1	4 oz glass jar	4 C	N
-08	S-085-0208-001	S-085	TCL VOCs	10:25	Soil	3/14/2012	4	5 g Encore	4 C	N
-08	S-085-0208-001	S-085	Soil Moisture	10:25	Soil	3/14/2012	1	4 oz glass jar	4 C	N
-09	S-086-0408-001	S-086	TCL VOCs	10:10	Soil	3/14/2012	4	5 g Encore	4 C	N
-09	S-086-0408-001	S-086	Soil Moisture	10:10	Soil	3/14/2012	1	4 oz glass jar	4 C	N
-10	S-087-0207-001	S-087	TCL VOCs	10:00	Soil	3/14/2012	4	5 g Encore	4 C	N

* Vial contains head space $\approx 3/15/12$, Collection time taken from sample container $\approx 3/15/12$, Soil moisture not provided $\approx 3/15/12$

Special Instructions: Email Results to Brittney.Kelly@westonsolutions.com

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

[illegible]

Removal Action Section
Weston Solutions, Inc.
1090 King Georges Post Rd
Edison, NJ 08837

CHAIN OF CUSTODY RECORD

Site: Mansfield Trail Dump
Contact Name: Brittney Kelly
Contact Phone: 908-565-2975

No: 2-031412-165440-0004

Date Shipped:
Lab: EPA DESA Laboratories
732-908-8888

1203022-10

Lab #	Sample #	Location	Analyses	Time	Matrix	Collected	Numb Cont	Container	Preservative	MS/MSD
-10	S-087-0207-001	S-087	Soil Moisture	10:00	Soil	3/14/2012	1	4 oz glass jar	4 C	N
-11	S-088-0208-001	S-088	TCL VOCs	11:28	Soil	3/14/2012	4	5 g Encore	4 C	N
-11	S-088-0208-001	S-088	Soil Moisture	11:28	Soil	3/14/2012	1	4 oz glass jar	4 C	N
-12	S-089-0208-001	S-089	TCL VOCs	9:05	Soil	3/14/2012	4	5 g Encore	4 C	N
-12	S-089-0208-001	S-089	Soil Moisture	9:05	Soil	3/14/2012	1	4 oz glass jar	4 C	N
-13	S-090-0212-001	S-090	TCL VOCs	10:20	Soil	3/14/2012	4	5 g Encore	4 C	N
-13	S-090-0212-001	S-090	Soil Moisture	10:20	Soil	3/14/2012	1	4 oz glass jar	4 C	N
-14	S-091-0207-001	S-091	TCL VOCs	11:16	Soil	3/14/2012	4	5 g Encore	4 C	N
-14	S-091-0207-001	S-091	Soil Moisture	11:16	Soil	3/14/2012	1	4 oz glass jar	4 C	N
-15	S-092-0212-001	S-092	TCL VOCs	11:00	Soil	3/14/2012	4	5 g Encore	4 C	N
-15	S-092-0212-001	S-092	Soil Moisture	11:00	Soil	3/14/2012	1	4 oz glass jar	4 C	N
-16	S-093-0210-001	S-093	TCL VOCs	10:38	Soil	3/14/2012	4	5 g Encore	4 C	N
-16	S-093-0210-001	S-093	Soil Moisture	10:38	Soil	3/14/2012	1	4 oz glass jar	4 C	N
-17	S-094-0210-001	S-094	TCL VOCs	10:55	Soil	3/14/2012	4	5 g Encore	4 C	N
-17	S-094-0210-001	S-094	Soil Moisture	10:55	Soil	3/14/2012	1	4 oz glass jar	4 C	N
-18	S-095-0208-001	S-095	TCL VOCs	10:47	Soil	3/14/2012	4	5 g Encore	4 C	N
-18	S-095-0208-001	S-095	Soil Moisture	10:47	Soil	3/14/2012	1	4 oz glass jar	4 C	N
-19	S-096-1220-001	S-096	TCL VOCs	11:10	Soil	3/14/2012	4	5 g Encore	4 C	N
-19	S-096-1220-001	S-096	Soil Moisture	11:10	Soil	3/14/2012	1	4 oz glass jar	4 C	N

3/15/12
Special Instructions:

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
ALL SAMPLES ALL ANALYSIS	<i>[Signature]</i>	3/14/12	<i>[Signature]</i>	3/14/12	1530						
11	<i>[Signature]</i>	3/14/12	<i>[Signature]</i>	3/15/12	7:15						

Received, hand-delivered on ice 2.0°C 3/14/12 @ 1752 AM 3/14/12

Removal Action Section

Weston Solutions, Inc., Edison, NJ

EPA Contract Number: EP-W-08-072

CHAIN OF CUSTODY RECORD

Mansfield Trail Dump

Contact Name: Britney Kelly

Contact Phone: 808-565-2975

No: 2-032912-134704-0018

Date Delivered: 3/29/12

Lab: EPA DESA Laboratories

Lab Phone: 732-806-6886

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
120308-01	S-166-0103-001	S-166	TCL VOCs	Soil	3/29/2012	12:45	12	5 g Encore	4C	Y
-01	S-166-0103-001	S-166	Soil Moisture	Soil	3/29/2012	12:45	1	4 oz glass jar	4C	N
-02	S-166-0103-002	S-166	TCL VOCs	Soil	3/29/2012	12:45	4	5 g Encore	4C	N
-02	S-166-0103-002	S-166	Soil Moisture	Soil	3/29/2012	12:45	1	4 oz glass jar	4C	N
-03	S-167-0103-001	S-167	TCL VOCs	Soil	3/29/2012	12:55	4	5 g Encore	4C	N
-03	S-167-0103-001	S-167	Soil Moisture	Soil	3/29/2012	12:55	1	4 oz glass jar	4C	N
-04	S-168-0103-001	S-168	TCL VOCs	Soil	3/29/2012	13:00	4	5 g Encore	4C	N
-04	S-168-0103-001	S-168	Soil Moisture	Soil	3/29/2012	13:00	1	4 oz glass jar	4C	N
-05	S-169-0103-001	S-169	TCL VOCs	Soil	3/29/2012	13:05	4	5 g Encore	4C	N
-05	S-169-0103-001	S-169	Soil Moisture	Soil	3/29/2012	13:05	1	4 oz glass jar	4C	N
-06	S-170-0103-001	S-170	TCL VOCs	Soil	3/29/2012	13:10	4	5 g Encore	4C	N
-06	S-170-0103-001	S-170	Soil Moisture	Soil	3/29/2012	13:10	1	4 oz glass jar	4C	N
-07	S-171-0103-001	S-171	TCL VOCs	Soil	3/29/2012	13:15	4	5 g Encore	4C	N
-07	S-171-0103-001	S-171	Soil Moisture	Soil	3/29/2012	13:15	1	4 oz glass jar	4C	N
-08	S-172-0103-001	S-172	TCL VOCs	Soil	3/29/2012	13:20	4	5 g Encore	4C	N
-08	S-172-0103-001	S-172	Soil Moisture	Soil	3/29/2012	13:20	1	4 oz glass jar	4C	N
-09	S-173-0103-001	S-173	TCL VOCs	Soil	3/29/2012	13:25	4	5 g Encore	4C	N
-09	S-173-0103-001	S-173	Soil Moisture	Soil	3/29/2012	13:25	1	4 oz glass jar	4C	N
-10	S-174-0103-001	S-174	TCL VOCs	Soil	3/29/2012	13:30	4	5 g Encore	4C	N

Special Instructions: 7 day turn around time. Please email signed COC and results to Britney.Kelly@westonsolutions.com.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All Samples for analysis	<i>[Signature]</i>	3/29/12	<i>[Signature]</i>	3/29/12	9:40 AM						

Received, hand-delivered on ice 9.8°C 3/29/12 @ 1644 DU 3/29/12

EPA Contract Number: EP-W-06-072

CHAIN OF CUSTODY RECORD

Mansfield Trail Pump

Contact Name: Britney Kelly

Contact Phone: 808-565-2975

No: 2-032912-134704-0018

Date Delivered: 3/29/12

Lab: EPA DESA Laboratories

Lab Phone: 732-906-6886

Lab #	Sample #	Location	Analysis	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
09-10	S-174-0103-001	S-174	Soil Moisture	Soil	3/29/2012	13:30	1	4 oz glass jar	4C	N
-11	S-175-0103-001	S-175	TCL VOCs	Soil	3/29/2012	12:55	4	5 g Encore	4C	N
-11	S-175-0103-001	S-175	Soil Moisture	Soil	3/29/2012	12:55	1	4 oz glass jar	4C	N
-12	S-176-0103-001	S-176	TCL VOCs	Soil	3/29/2012	13:00	4	5 g Encore	4C	N
-12	S-176-0103-001	S-176	Soil Moisture	Soil	3/29/2012	13:00	1	4 oz glass jar	4C	N
-13	S-177-0103-001	S-177	TCL VOCs	Soil	3/29/2012	13:05	4	5 g Encore	4C	N
-13	S-177-0103-001	S-177	Soil Moisture	Soil	3/29/2012	13:05	1	4 oz glass jar	4C	N
-14	S-178-0103-001	S-178	TCL VOCs	Soil	3/29/2012	13:10	4	5 g Encore	4C	N
-14	S-178-0103-001	S-178	Soil Moisture	Soil	3/29/2012	13:10	1	4 oz glass jar	4C	N
-15	S-179-0103-001	S-179	TCL VOCs	Soil	3/29/2012	13:15	4	5 g Encore	4C	N
-15	S-179-0103-001	S-179	Soil Moisture	Soil	3/29/2012	13:15	1	4 oz glass jar	4C	N
-16	S-180-0103-001	S-180	TCL VOCs	Soil	3/29/2012	13:20	4	5 g Encore	4C	N
-16	S-180-0103-001	S-180	Soil Moisture	Soil	3/29/2012	13:20	1	4 oz glass jar	4C	N
-17	S-181-0103-001	S-181	TCL VOCs	Soil	3/29/2012	13:25	4	5 g Encore	4C	N
-17	S-181-0103-001	S-181	Soil Moisture	Soil	3/29/2012	13:25	1	4 oz glass jar	4C	N
-18	S-182-0103-001	S-182	TCL VOCs	Soil	3/29/2012	13:30	4	5 g Encore	4C	N
-18	S-182-0103-001	S-182	Soil Moisture	Soil	3/29/2012	13:30	1	4 oz glass jar	4C	N
-19	S-183-0103-001	S-183	TCL VOCs	Soil	3/29/2012	13:35	4	5 g Encore	4C	N
-19	S-183-0103-001	S-183	Soil Moisture	Soil	3/29/2012	13:35	1	4 oz glass jar	4C	N

Special Instructions: 7 day turn around time. Please email signed COC and results to Brittney.Kelly@westonsolutions.com.

SAMPLES TRANSFERRED FROM	
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CHAIN OF CUSTODY #[illegible]

Mansfield Trail Dump
Contact Name: Brittney Kelly
Contact Phone: 908-865-2975

Date Delivered: 3/29/12
Lab: EPA DESA Laboratories
Lab Phone: 732-906-6886

[illegible]

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

[illegible]

Removal Action Section
Weston Solutions, Inc.
1090 King Georges Post Rd
Edison, NJ 08837

CHAIN OF CUSTODY RECORD

Site: Mansfield Trail Site
Contact Name: Brittney Kaly
Contact Phone: 808-665-2875

No: 2-031512-154337-0006

Date Shipped:
Lab: EPA/DESA Laboratories
732-808-6886

Lab #	Sample #	Location	Analyses	Matrix	Sample Type	Collected	Sample Time	Numb Cent	Container	Preservative	MS/MS D
1203026-01	S-097-5253-001	S-097	TCL VOCs	Soil	Field Sample	3/15/2012	12:30	4	5 g Encore	4 C	N
-01	S-097-5253-001	S-097	Soil Moisture	Soil	Field Sample	3/15/2012	12:30	1	4 oz glass jar	4 C	N
-02	S-098-5051-001	S-098	TCL VOCs	Soil	Field Sample	3/15/2012	12:19	4	5 g Encore	4 C	N
-02	S-098-5051-001	S-098	Soil Moisture	Soil	Field Sample	3/15/2012	12:19	1	4 oz glass jar	4 C	N
-03	S-098-5051-001	S-098	TCL VOCs	Soil	Field Sample	3/15/2012	12:12	4	5 g Encore	4 C	N
-03	S-098-5051-001	S-098	Soil Moisture	Soil	Field Sample	3/15/2012	12:12	1	4 oz glass jar	4 C	N
-04	S-100-5051-001	S-100	TCL VOCs	Soil	Field Sample	3/15/2012	11:29	4	5 g Encore	4 C	N
-04	S-100-5051-001	S-100	Soil Moisture	Soil	Field Sample	3/15/2012	11:29	1	4 oz glass jar	4 C	N
-05	S-101-5253-001	S-101	TCL VOCs	Soil	Field Sample	3/15/2012	12:00	4	5 g Encore	4 C	N
-05	S-101-5253-001	S-101	Soil Moisture	Soil	Field Sample	3/15/2012	12:00	1	4 oz glass jar	4 C	N
-06	S-102-2827-001	S-102	TCL VOCs	Soil	Field Sample	3/15/2012	12:41	4	5 g Encore	4 C	N

03/15/12

* S-099-5051-001 cap is received broken

Special Instructions: TAT 7 days

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All items for analysis	[Signature]	3/15/12	[Signature]	3/15/12	18:17						

Received, hand delivered on ice @ 1723 on 3/15/12 5.3°C

Site: Mansfield Trail Site
Contact Name: Britney Kely
Contact Phone: 905-585-2975

Date Shipped: _____
Lab: EPA DESA Laboratories
732-906-8888

Lab #	Sample #	Location	Analyses	Matrix	Sample Type	Collected	Sample Time	Numb Cont	Container	Preservativ e	MS/MS D
3026-06	S-102-2827-001	S-102	Soil Moisture	Soil	Field Sample	3/15/2012	12:41	1	4 oz glass jar	4 C	N
-07	S-103-1213-001	S-103	TCL VOCs	Soil	Field Sample	3/15/2012	11:10	4	5 g Encore	4 C	N
-07	S-103-1213-001	S-103	Soil Moisture	Soil	Field Sample	3/15/2012	11:10	1	4 oz glass jar	4 C	N
-08	S-104-1213-001	S-104	TCL VOCs	Soil	Field Sample	3/15/2012	11:35	12	5 g Encore	4 C	Y
-08	S-104-1213-001	S-104	Soil Moisture	Soil	Field Sample	3/15/2012	11:35	1	4 oz glass jar	4 C	N
-09	S-104-1213-002	S-104	TCL VOCs	Soil	Field Duplicate	3/15/2012	11:35	4	5 g Encore	4 C	N
-09	S-104-1213-002	S-104	Soil Moisture	Soil	Field Duplicate	3/15/2012	11:35	1	4 oz glass jar	4 C	N
-10	S-105-0607-001	S-105	TCL VOCs	Soil	Field Sample	3/15/2012	11:53	4	5 g Encore	4 C	N
-10	S-105-0607-001	S-105	Soil Moisture	Soil	Field Sample	3/15/2012	11:53	1	4 oz glass jar	4 C	N
-11	S-106-2425-001	S-106	TCL VOCs	Soil	Field Sample	3/15/2012	12:06	4	5 g Encore	4 C	N
-11	S-106-2425-001	S-106	Soil Moisture	Soil	Field Sample	3/15/2012	12:06	1	4 oz glass jar	4 C	N

6043/15/12

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
ALL Items for Analysis	<i>[Signature]</i>	3/15/12	<i>[Signature]</i>	3/15/12	18:17						

Site: Mansfield Trail Site
Contact Name: Brittney Kelly
Contact Phone: 908-565-2976

Date Shipped:
Lab: EPA DESA Laboratories
732-908-6586

Lab #	Sample #	Location	Analyses	Matrix	Sample Type	Collected	Sample Time	Numb Cont	Container	Preservativ e	MS/MS D
026-12	S-107-1617-001	S-107	TCL VOCs	Soil	Field Sample	3/15/2012	12:28	4	5 g Encore	4 C	N
-12	S-107-1617-001	S-107	Soil Moisture	Soil	Field Sample	3/15/2012	12:28	1	4 oz glass jar	4 C	N
-13	S-108-0607-001	S-108	TCL VOCs	Soil	Field Sample	3/15/2012	12:30	4	5 g Encore	4 C	N
-13	S-108-0607-001	S-108	Soil Moisture	Soil	Field Sample	3/15/2012	12:30	1	4 oz glass jar	4 C	N
-14	S-109-2425-001	S-109	TCL VOCs	Soil	Field Sample	3/15/2012	10:50	4	5 g Encore	4 C	N
-14	S-109-2425-001	S-109	Soil Moisture	Soil	Field Sample	3/15/2012	10:50	1	4 oz glass jar	4 C	N
-15	S-110-2627-001	S-110	TCL VOCs	Soil	Field Sample	3/15/2012	11:01	4	5 g Encore	4 C	N
-15	S-110-2627-001	S-110	Soil Moisture	Soil	Field Sample	3/15/2012	11:01	1	4 oz glass jar	4 C	N
-16	S-111-2930-001	S-111	TCL VOCs	Soil	Field Sample	3/15/2012	11:05	4	5 g Encore	4 C	N
-16	S-111-2930-001	S-111	Soil Moisture	Soil	Field Sample	3/15/2012	11:05	1	4 oz glass jar	4 C	N
-17	S-112-1617-001	S-112	TCL VOCs	Soil	Field Sample	3/15/2012	10:45	4	5 g Encore	4 C	N

643/15/12

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

[illegible]

Site: Mansfield Trail Site
Contact Name: Brittney Kely
Contact Phone: 908-565-2976

Date Shipped:
Lab. EPA DESA Laboratories
732-902-8888

1203026 - 17

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1203026 - 18

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
ALL Items for Analyses	<i>[Signature]</i>	3/15/12	<i>[Signature]</i>	3/15/12	18:17						

Removal Action Section
Weston Solutions, Inc.
1090 King Georges Post Rd
Edison, NJ 08837

CHAIN OF CUSTODY RECORD

Mansfield Trail Dump
Contact Name: Brittney Kelly
Contact Phone: 908-565-2975

No: 2-031812-111345-0008

Date Shipped: 3/16/2012

Lab: EPA DESA Laboratories

732-906-6886

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
1203028-22	RE-031812-001	Outside Site Trailer	TCL VOCs *	Water	3/16/2012	12:00	1	VOA	4 C	N
1203028-01	S-116-0102-001	S-116	TCL VOCs	Soil	3/16/2012	09:26	12	5 g Encore	4 C	Y
-01	S-116-0102-001	S-116	Soil Moisture	Soil	3/16/2012	09:26	1	4 oz glass jar	4 C	N
-02	S-116-0102-002	S-116	TCL VOCs	Soil	3/16/2012	09:26	4	5 g Encore	4 C	N
-02	S-116-0102-002	S-116	Soil Moisture	Soil	3/16/2012	09:26	1	4 oz glass jar	4 C	N
-03	S-117-0203-001	S-117	TCL VOCs	Soil	3/16/2012	09:15	4	5 g Encore	4 C	N
-03	S-117-0203-001	S-117	Soil Moisture	Soil	3/16/2012	09:15	1	4 oz glass jar	4 C	N
-04	S-118-0203-001	S-118	TCL VOCs	Soil	3/16/2012	09:32	4	5 g Encore	4 C	N
-04	S-118-0203-001	S-118	Soil Moisture	Soil	3/16/2012	09:32	1	4 oz glass jar	4 C	N
-05	S-119-0203-001	S-119	TCL VOCs	Soil	3/16/2012	09:38	4	5 g Encore	4 C	N
-05	S-119-0203-001	S-119	Soil Moisture	Soil	3/16/2012	09:38	1	4 oz glass jar	4 C	N
-06	S-120-0203-001	S-120	TCL VOCs	Soil	3/16/2012	09:45	4	5 g Encore	4 C	N
-06	S-120-0203-001	S-120	Soil Moisture	Soil	3/16/2012	09:45	1	4 oz glass jar	4 C	N
-07	S-121-0203-001	S-121	TCL VOCs	Soil	3/16/2012	09:44	4	5 g Encore	4 C	N
-07	S-121-0203-001	S-121	Soil Moisture	Soil	3/16/2012	09:44	1	4 oz glass jar	4 C	N
-08	S-122-0203-001	S-122	TCL VOCs	Soil	3/16/2012	09:50	4	5 g Encore	4 C	N
-08	S-122-0203-001	S-122	Soil Moisture	Soil	3/16/2012	09:50	1	4 oz glass jar	4 C	N
-09	S-123-0203-001	S-123	TCL VOCs	Soil	3/16/2012	09:55	4	5 g Encore	4 C	N
-09	S-123-0203-001	S-123	Soil Moisture	Soil	3/16/2012	09:55	1	4 oz glass jar	4 C	N

* Vial contains air bubble. 3/16/12

Special Instructions: 7 day turn around time. Please email results to Brittney.Kelly@westonsolutions.com.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All Hens for analysis	[Signature]	3/16/12	[Signature]	3/16/12	15:15						

Temp. = 8.4 °C Hand delivered

Mansfield Trail Dump
Contact Name: Brittney Kelly
Contact Phone: 908-566-2975

Lab: EPA DESA Laboratories
732-906-6886

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
28-10	S-124-0203-001	S-124	TCL VOCs	Soil	3/16/2012	10:00	4	5 g Encore	4 C	N
-10	S-124-0203-001	S-124	Soil Moisture	Soil	3/16/2012	10:00	1	4 oz glass jar	4 C	N
-11	S-125-0203-001	S-125	TCL VOCs	Soil	3/16/2012	10:06	4	5 g Encore	4 C	N
-11	S-125-0203-001	S-125	Soil Moisture	Soil	3/16/2012	10:06	1	4 oz glass jar	4 C	N
-12	S-126-0203-001	S-126	TCL VOCs	Soil	3/16/2012	10:10	4	5 g Encore	4 C	N
-12	S-126-0203-001	S-126	Soil Moisture	Soil	3/16/2012	10:10	1	4 oz glass jar	4 C	N
-13	S-127-0203-001	S-126	TCL VOCs	Soil	3/16/2012	10:15	4	5 g Encore	4 C	N
-13	S-127-0203-001	S-126	Soil Moisture	Soil	3/16/2012	10:15	1	4 oz glass jar	4 C	N
-14	S-128-0203-001	S-128	TCL VOCs	Soil	3/16/2012	10:22	4	5 g Encore	4 C	N
-14	S-128-0203-001	S-128	Soil Moisture	Soil	3/16/2012	10:22	1	4 oz glass jar	4 C	N
-15	S-129-3033-001	S-129	TCL VOCs	Soil	3/16/2012	10:30	4	5 g Encore	4 C	N
-15	S-129-3033-001	S-129	Soil Moisture	Soil	3/16/2012	10:30	1	4 oz glass jar	4 C	N
-16	S-130-3637-001	S-128	TCL VOCs	Soil	3/16/2012	10:37	4	5 g Encore	4 C	N
-16	S-130-3637-001	S-128	Soil Moisture	Soil	3/16/2012	10:37	1	4 oz glass jar	4 C	N
-17	S-131-2223-001	S-131	TCL VOCs	Soil	3/16/2012	10:45	4	5 g Encore	4 C	N
-17	S-131-2223-001	S-131	Soil Moisture	Soil	3/16/2012	10:45	1	4 oz glass jar	4 C	N
-18	S-132-4041-001	S-132	TCL VOCs	Soil	3/16/2012	10:50	4	5 g Encore	4 C	N
-18	S-132-4041-001	S-132	Soil Moisture	Soil	3/16/2012	10:50	1	4 oz glass jar	4 C	N
-19	S-133-1213-001	S-133	TCL VOCs	Soil	3/16/2012	10:54	4	5 g Encore	4 C	N

3/16/12

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
ALL Items for Analysis	<i>[Signature]</i>	3/16/12	<i>[Signature]</i>	3/16/12	15:05						

Mansfield Trail Dump
Contact Name: Brittney Kelly
Contact Phone: 908-565-2975

Date Shipped: 3/16/2012
Lab: EPA DESA Laboratories
732-906-6886

[illegible]

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

[illegible]

Mansfield Trail Dump
Contact Name: Brittney Kelly
Contact Phone: 908-565-2975

Lab: EPA DESA Laboratories
Lab Phone: 732-906-6886

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
01	S-136-0103-001	S-136	TCL VOCs	Soil	3/27/2012	10:15	12	5 g Encore	4 C	Y
01	S-136-0103-001	S-136	Soil Moisture	Soil	3/27/2012	10:15	1	4 oz glass jar	4 C	N
02	S-136-0103-002	S-136	TCL VOCs	Soil	3/27/2012	10:15	4	5 g Encore	4 C	N
02	S-136-0103-002	S-136	Soil Moisture	Soil	3/27/2012	10:15	1	4 oz glass jar	4 C	N
03	S-137-0103-001	S-137	TCL VOCs	Soil	3/27/2012	10:20	4	5 g Encore	4 C	N
03	S-137-0103-001	S-137	Soil Moisture	Soil	3/27/2012	10:20	1	4 oz glass jar	4 C	N
04	S-138-0103-001	S-138	TCL VOCs	Soil	3/27/2012	10:25	4	5 g Encore	4 C	N
04	S-138-0103-001	S-138	Soil Moisture	Soil	3/27/2012	10:25	1	4 oz glass jar	4 C	N
05	S-139-0103-001	S-139	TCL VOCs	Soil	3/27/2012	10:30	4	5 g Encore	4 C	N
05	S-139-0103-001	S-139	Soil Moisture	Soil	3/27/2012	10:30	1	4 oz glass jar	4 C	N
06	S-140-0103-001	S-140	TCL VOCs	Soil	3/27/2012	10:35	4	5 g Encore	4 C	N
06	S-140-0103-001	S-140	Soil Moisture	Soil	3/27/2012	10:35	1	4 oz glass jar	4 C	N
07	S-141-0103-001	S-141	TCL VOCs	Soil	3/27/2012	10:40	4	5 g Encore	4 C	N
07	S-141-0103-001	S-141	Soil Moisture	Soil	3/27/2012	10:40	1	4 oz glass jar	4 C	N
08	S-142-0103-001	S-142	TCL VOCs	Soil	3/27/2012	10:45	4	5 g Encore	4 C	N
08	S-142-0103-001	S-142	Soil Moisture	Soil	3/27/2012	10:45	1	4 oz glass jar	4 C	N
09	S-143-0103-001	S-143	TCL VOCs	Soil	3/27/2012	10:50	4	5 g Encore	4 C	N
09	S-143-0103-001	S-143	Soil Moisture	Soil	3/27/2012	10:50	1	4 oz glass jar	4 C	N
10	S-144-0103-001	S-144	TCL VOCs	Soil	3/27/2012	10:55	4	5 g Encore	4 C	N

Special Instructions: 7 day turn around time. Please email signed COC and results to Brittney.Kelly@westonsolutions.com.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All Samples for analysis	RSTB	3/27/12	MLC	3/27/12	14:30						
	MLC	3/27/12	[Signature]	3/27/12	16:30						

Contact Phone: 908-565-2975

Lab Phone: 732-906-6886

1203059-10

-11
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-12
-12
-13
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3/21/12

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

[illegible]

Contact Phone: 908-565-2975

Lab Phone: 732-906-6886

1203059-20
-20
-21
-21
20
3/21/12

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

[illegible]

Removal Action Section

Weston Solutions, Inc. Edison, NJ

EPA Contract Number: EP-W-06-072

CHAIN OF CUSTODY RECORD

Mansfield Trail Dump

Contact Name: Brittney Kelly

Contact Phone: 908-565-2975

No: 2-032812-152855-0016

Date Shipped: 3/28/2012

Lab: EPA DESA Laboratories

Lab Phone: 732-906-6886

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
1203066-01	S-158-0103-001	S-158	TCL VOCs	Soil	3/28/2012	14:00	4	5 g Encore	4 C	N
-01	S-158-0103-001	S-158	Soil Moisture	Soil	3/28/2012	14:00	1	4 oz glass jar	4 C	N
-02	S-157-2425-001	S-157	TCL VOCs	Soil	3/28/2012	14:10	12	5 g Encore	4 C	Y
-02	S-157-2425-001	S-157	Soil Moisture	Soil	3/28/2012	14:10	1	4 oz glass jar	4 C	N
-03	S-157-2425-002	S-157	TCL VOCs	Soil	3/28/2012	14:00	4	5 g Encore	4 C	N
-03	S-157-2425-002	S-157	Soil Moisture	Soil	3/28/2012	14:00	1	4 oz glass jar	4 C	N
-04	S-158-2425-001	S-158	TCL VOCs	Soil	3/28/2012	14:15	4	5 g Encore	4 C	N
-04	S-158-2425-001	S-158	Soil Moisture	Soil	3/28/2012	14:15	1	4 oz glass jar	4 C	N
-05	S-159-2425-001	S-159	TCL VOCs	Soil	3/28/2012	14:20	4	5 g Encore	4 C	N
-05	S-159-2425-001	S-159	Soil Moisture	Soil	3/28/2012	14:20	1	4 oz glass jar	4 C	N
-06	S-160-2425-001	S-160	TCL VOCs	Soil	3/28/2012	14:25	4	5 g Encore	4 C	N
-06	S-160-2425-001	S-160	Soil Moisture	Soil	3/28/2012	14:25	1	4 oz glass jar	4 C	N
-07	S-161-1617-001	S-161	TCL VOCs	Soil	3/28/2012	14:30	4	5 g Encore	4 C	N
-07	S-161-1617-001	S-161	Soil Moisture	Soil	3/28/2012	14:30	1	4 oz glass jar	4 C	N
-08	S-162-3637-001	S-162	TCL VOCs	Soil	3/28/2012	14:25	4	5 g Encore	4 C	N
-08	S-162-3637-001	S-162	Soil Moisture	Soil	3/28/2012	14:25	1	4 oz glass jar	4 C	N
-09	S-163-3637-001	S-163	TCL VOCs	Soil	3/28/2012	14:20	4	5 g Encore	4 C	N
-09	S-163-3637-001	S-163	Soil Moisture	Soil	3/28/2012	14:20	1	4 oz glass jar	4 C	N
-10	S-164-3637-001	S-164	TCL VOCs	Soil	3/28/2012	14:15	4	5 g Encore	4 C	N

Special Instructions: 7 day turn around time. Please email signed COC and results to Brittney.Kelly@westonsolutions.com.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All Samples for analysis	[Signature]	3/28/12	[Signature]	3/29/12	8:14 AM						

Received, hand-delivered on ice @ 14.3°C @ 1722 all 3/28/12

EPA Contract Number: EP-WY-06-072

CHAIN OF CUSTODY RECORD

Mansfield Trail Dump

Contact Name: Brittney Kelly

Contact Phone: 908-585-2975

No: 2-032812-162855-0016

DateShipped: 3/28/2012

Lab: EPA DESA Laboratories

Lab Phone: 732-906-8886

[illegible]

Special Instructions: 7 day turn around time. Please email signed GOC and results to Brittney.Kelly@westonsolutions.com.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

[illegible]

YORK

ANALYTICAL LABORATORIES, INC.

120 RESEARCH DR. STRATFORD, CT 06615
(203) 325-1371 FAX (203) 357-0166

Field Chain-of-Custody Record

Page 1 of 3

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions unless superseded by written contract.

York Project No. _____

YOUR Information	Report To:	Invoice To:	YOUR Project ID	Turn-Around Time	Report Type/Deliverables
Company: <u>Environmental Restoration</u>	Company: <u>ER, LLC</u>	Company: <u>Environmental Restoration</u>	<u>Mansfield Trail</u>	RUSH - Same Day <input type="checkbox"/>	Summary Report _____
Address: <u>28 Sparta Rd</u>	Address: <u>288 New Hyde Park</u>	Address: <u>1666 Fabick Dr</u>	<u>MT-42</u>	RUSH - Next Day <input type="checkbox"/>	Summary w/ QA Summary _____
City: <u>Stanhope, NJ</u>	City: <u>Franklin SQ NY 11010</u>	City: <u>St. Louis MO 63026</u>	Purchase Order No.	RUSH - Two Day <input type="checkbox"/>	CT RCP Package _____
Phone No. <u>(201) 727-3316</u>	Phone No. <u>(651) 775-3861</u>	Phone No. <u>(651) 775-3861</u>	<u>8120</u>	RUSH - Three Day <input checked="" type="checkbox"/>	NY ASP A Package _____
Contact Person: <u>Thomas Williams</u>	Attention: <u>Karen Mercier</u>	Attention: <u>Accounts Payable</u>		RUSH - Four Day <input type="checkbox"/>	NY ASP B Package _____
E-Mail Address: <u>T.Williams@ERLLC.com</u>	E-Mail Address: <u>K.mercier@ERLLC.com</u>	E-Mail Address: <u>Same</u>		Standard (5-7 Days) <input type="checkbox"/>	<u>Electronic Deliverables</u>
			Samples from: CT <input type="checkbox"/> NY <input type="checkbox"/> NJ <input checked="" type="checkbox"/>		EDD (Specify Type) _____
					Excel _____

Print Clearly and Legibly. All Information must be complete.
Samples will NOT be logged in until the turn-around time clock will not begin until any questions by York are resolved.

Joseph F. Overend III
 Samples Collected/Authorized By (Signature)
JOSEPH F. OVEREND III
 Name (printed)

Matrix Codes
 S - soil
 Other - specify (oil, etc.)
 WW - wastewater
 GW - groundwater
 DW - drinking water
 Air-A - ambient air
 Air-SV - soil vapor

Volatiles	Semi-Vols	Pest/PCB/Herb	Metals	Misc. Org.	Full Lists	Common Miscellaneous Parameters
8260 full 624 STARS list BTEX MTBE TCL list TAGM list CT RCP list Arom. only Halog. only App. IX list 8021B list	TICs Site Spec. BN Only Acids Only PAH list TAGM list CT RCP list TCL list NJDEP list App. IX SPL or TCLP SPL or TCLP	8270 or 625 STARS list 8081Pest 8151Herb CT RCP App. IX Site Spec. SPL or TCLP TCLP Pest TCLP Herb Chlordane 608 Pest 608 PCB	RCRA8 PP13 list TAL CT15 list TAGM list NJDEP list Total Dissolved SPL or TCLP Inhib. Metals LIST Below	TPH GRO TPH DRO CT ETPH NY 310-13 TPH 1664 Air TO14A Air TO15 Air STARS Air VPH Air TICs Methane Helium	Pri. Poll. TCL Organics TAL MetCN Full TCLP Full App. IX Part 360 Routine Part 360 Baseline Part 360 Synthetic Full List NYCDEP Sewer NYSDEC Sewer TAGM	Corrosivity Reactivity Ignitability Flash Point Sieve Anal. Heterotrophs TOX BTU/lb. Aquatic Tox. TOC Asbestos Silica Nitrate Nitrite TKN Total Nitrogen Ammonia-N Chloride Phosphate Total Phos. Oil & Grease F.O.G. pH MBAS Color Phenols Cyanide-T Cyanide-A BOD5 CBOD5 BOD28 COD TSS Total Solids TDS TPH-1664

Special Instructions
 Field Filtered ☐
 Lab to Filter ☐

Sample Identification	Date Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
S-001-0024-001	02/22/12/1410	Soil	TCLP-RCRA 8 metals, VOC, SVOC, Herbicides, Pesticides	207, 407, 807
S-001-0024-002	02/22/12/1410		Corrosivity/PH, Ignitability, reactive cyanide + surf	glass jars
S-002-0030-001	02/22/12/1435		TPH-DRO + GRO	
S-003-0024-001	02/22/12/1500			
S-004-0018-001	02/22/12/1520			
S-005-0024-001	02/22/12/1530			
S-006-0024-001	02/23/12/1048			
S-007-0014-001	02/23/12/1104			
S-008-0033-001	02/23/12/1124			
S-009-0036-001	02/23/12/1153			
Comments Three (3) day turn around time		Preservation Check those Applicable	4°C <input checked="" type="checkbox"/> Frozen HCl _____ MeOH _____ ZnAc _____ Ascorbic Acid _____ HNO ₃ _____ H ₂ O ₂ _____ Other _____ NaOH _____	Temperature on Receipt _____ °C
Samples Relinquished By		Date/Time	Samples Received By	Date/Time
Samples Relinquished By		Date/Time	Samples Received in LAB by	Date/Time

YORK

ANALYTICAL LABORATORIES, INC.

120 RESEARCH DR. STRATFORD, CT 06615

(203) 325-1371 FAX (203) 357-0166

Field Chain-of-Custody Record

Page 2 of 3

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.

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York Project No. _____

YOUR Information (ER) Company: <u>Environmental Resources</u> Site Address: <u>28 Sporta Rd</u> <u>Stanhope, NJ</u> Phone No. <u>(607) 727-3316</u> Contact Person: <u>Thomas Williams</u> E-Mail Address: <u>T.Williams@ERLLC.com</u>		Report To: Company: <u>ER, LLC</u> Address: <u>288 New Hyde Park</u> <u>Franklin Sq, NY 11016</u> Phone No. <u>(651) 775-3861</u> Attention: <u>Karen Mercer</u> E-Mail Address: <u>K.mercer@ERLLC.com</u>		Invoice To: Company: <u>ER, LLC</u> Address: <u>1666 Fabick Dr</u> <u>St. Louis, MO 63026</u> Phone No. <u>(651) 775-3861</u> Attention: <u>Account Payable</u> E-Mail Address: _____		YOUR Project ID <u>Mansfield Trail</u> <u>MT 2-42</u> Purchase Order No. <u>8120</u> Samples from: CT <input checked="" type="checkbox"/> NY <input checked="" type="checkbox"/> NJ <input checked="" type="checkbox"/>		Turn-Around Time RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input type="checkbox"/> RUSH - Three Day <input checked="" type="checkbox"/> RUSH - Four Day <input type="checkbox"/> Standard (5-7 Days) <input type="checkbox"/>		Report Type/Deliverables Summary Report _____ Summary w/ QA Summary _____ CT RCP Package _____ NY ASP A Package _____ NY ASP B Package _____ <u>Electronic Deliverables:</u> EDD (Specify Type) _____ Excel _____	
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Print Clearly and Legibly. All information must be complete. Samples will NOT be tested in and the turn-around time clock will not begin until any questions by York are resolved. <u>Joseph F. Overend II</u> Samples Collected/Authorized By (Signature) <u>Joseph F. Overend II</u> Name (printed)	Matrix Codes S - soil Other - specify (oil, etc.) WW - wastewater GW - groundwater DW - drinking water Air-A - ambient air Air-SV - soil vapor	Volatiles 8260 full 624 STARS list BTEX MTBE TCL list TAGM list CT RCP list Arom. only Halog. only App. IX list 8021B list	Semi-Vols 8270 or 625 STARS list BN Only Acids Only PAH list TAGM list CT RCP list NIJEP list App. IX list SPLP/TCLP	PCB/Herb 8082PCB 8081Pest 8151Herb CT RCP App. IX Site Spec. SPLP/TCLP TCLP Pest TCLP Herb Chlordane 608 Pest LIST Below 608 PCB	Metals RCRA8 PP13 list TAL CT15 list TAGM list NIJEP list Total Dissolved SPLP/TCLP Indic. Metals LIST Below Helium	Misc. Org. TPH GRO TPH DRO CT ETPH NY 310-13 TPH 1664 Air TO14A Air TO15 Air STARS Air VPH Air TICs Methane Helium	Full Lists Pri. Poll. TCL Organics TAL Met/ON Full TCLP Full App. IX Part 360 Routine Part 360 Baseline Part 360 Expanded Part 360 Expanded NYCDEP Sewer NYSEDC Sewer TAGM	Common Miscellaneous Parameters Conductivity Reactivity Ignitability Flash Point Sieve Anal. Heterotrophs TOX BTU/lb. Aquatic Tox. TOC Asbestos Silica	Special Instructions Nitrate Nitrite TKN Tot. Nitrogen Ammonia-N Chloride Phosphate Tot. Phos. Oil & Grease F.O.G. pH MBAS Color Phenols Cyanide-T Cyanide-A BOD5 CBOD5 BOD28 COD TSS Total Solids TDS TPH-1664	Special Instructions Field Filtered <input type="checkbox"/> Lab to Filter <input type="checkbox"/>

Sample Identification	Date/Sampled Time	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
S-010-0029-001	02-23-12/1328	Soil	TCLP-RCRA 8 metals, VOC, SVOC, Herbicides, Pesticides	8oz, 4oz, 8oz
S-011-0036-001	02-23-12/1350		Corrosivity/pH, ignitability, reactive Cyanide + Sulfide	glass jars
S-012-0041-001	02-23-12/1410		TPH - DRG & GRO	
S-013-0035-001	02-23-12/1435			
S-014-0030-001	02-23-12/1512			
S-015-0024-001	02-24-12/1248			
S-016-0023-001	02-24-12/1304			
S-017-0022-001	02-24-12/1319			
S-018-0013-001	02-24-12/1331			
S-019-0012-001	02-24-12/1348			
Comments Three (3) day turn around time		Preservation Check those Applicable 4°C <input checked="" type="checkbox"/> Frozen <input type="checkbox"/> HCl <input type="checkbox"/> MeOH <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₂ O ₂ <input type="checkbox"/> NaOH <input type="checkbox"/> ZnAc <input type="checkbox"/> Ascorbic Acid <input type="checkbox"/> Other <input type="checkbox"/>		
Samples Relinquished By <u>Joseph F. Overend II</u>		Date/Time <u>2/28/12 11:50</u>		Temperature on Receipt ____ °C
Samples Relinquished By ____		Date/Time ____		
Samples Received By <u>JA</u>		Date/Time <u>2/28 11:50</u>		
Samples Received in LAB by ____		Date/Time ____		

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York Project No.

51/ YOUR Information Company: <u>ER, LLC</u> Address: <u>28 Sparta Rd</u> <u>Stanhope, NJ</u> Phone No. <u>(609) 727-3816</u> Contact Person: <u>Thomas Williams</u> E-Mail Address: <u>T.Williams@ERLLC.com</u>	Report To: Company: <u>ER, LLC</u> Address: <u>288 New Hope Rd</u> <u>Franklin Sq, NY 11016</u> Phone No. <u>(651) 775-3861</u> Attention: <u>Karen Mercier</u> <u>K.Mercier@ERLLC.com</u> E-Mail Address:	Invoice To: Company: <u>ER, LLC</u> Address: <u>1166 Fisk St</u> <u>St. Louis MO 63026</u> Phone No. <u>(651) 775-3861</u> Attention: <u>Karen Mercier</u> <u>K.Mercier@ERLLC.com</u> E-Mail Address:	YOUR Project ID <u>Mansfield Trail</u> <u>MT2-42</u> Purchase Order No. <u>8120</u> Samples from: CT <input type="checkbox"/> NY <input type="checkbox"/> NJ <input checked="" type="checkbox"/>	Turn-Around Time RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input type="checkbox"/> RUSH - Three Day <input checked="" type="checkbox"/> RUSH - Four Day <input type="checkbox"/> Standard (5-7 Days) <input type="checkbox"/>	Report Type/Deliverables Summary Report <input type="checkbox"/> Summary w/ QA Summary <input type="checkbox"/> CT RCP Package <input type="checkbox"/> NY ASP A Package <input type="checkbox"/> NY ASP B Package <input type="checkbox"/> <u>Electronic Deliverables</u> EDD (Specify Type) Excel <input type="checkbox"/>
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E-mail Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>		Phone: <u> </u>		Fax: <u> </u>		Name: <u> </u>		Company: <u> </u>		Address: <u> </u>		City: <u> </u>		State: <u> </u>		Zip: <u> </u>	
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[illegible]

Comments Three (3) day turn around time	Preservation	4°C <input checked="" type="checkbox"/> Frozen	HCl	MeOH	HNO ₃	H ₂ SO ₄	NaOH	Temperature on Receipt ____ °C
	Check those Applicable	ZnAc	Ascorbic Acid	Other				
	Samples Relinquished By	Date/Time	Samples Received By	Date/Time				
	Samples Relinquished By	Date/Time	Samples Received in LAB by	Date/Time				

YORK

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120 RESEARCH DR. STRATFORD, CT 06615

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Field Chain-of-Custody Record

Page 1 of 2

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York Project No. _____

YOUR Information		Report To:		Invoice To:		YOUR Project ID		Turn-Around Time		Report Type/Deliverables	
(Site) <u>Environmental Restoration</u>		Company: <u>ER, LLC</u>		Company: <u>ER, LLC</u>		<u>Mansfield Trail</u>		RUSH - Same Day <input type="checkbox"/>		Summary Report <input type="checkbox"/>	
Address: <u>288 Sparta Rd</u>		Address: <u>288 New Hyde Park Rd</u>		Address: <u>11666 Fabick Dr</u>		<u>MTA-42</u>		RUSH - Next Day <input type="checkbox"/>		Summary w/ QA Summary <input type="checkbox"/>	
<u>Stanhope, NJ</u>		<u>Franklin Sq, NJ 11016</u>		<u>St. Louis MO 63026</u>		Purchase Order No.		RUSH - Two Day <input type="checkbox"/>		CT RCP Package <input type="checkbox"/>	
Phone No. <u>(607) 727-3316</u>		Phone No. <u>(651) 775-3864</u>		Phone No. <u>Same</u>		<u>8120</u>		RUSH - Three Day <input checked="" type="checkbox"/>		NY ASP A Package <input type="checkbox"/>	
Contact Person: <u>Thomas Williams</u>		Attention: <u>Karen Mercier</u>		Attention: <u>Accounts Payable</u>				RUSH - Four Day <input type="checkbox"/>		NY ASP B Package <input type="checkbox"/>	
E-Mail Address: <u>T.Williams@ERLLC.com</u>		E-Mail Address: <u>K.mercier@ERLLC.com</u>		E-Mail Address: <u>Same</u>		Samples from: CT <input type="checkbox"/> NY <input checked="" type="checkbox"/> NJ <input checked="" type="checkbox"/>		Standard (5-7 Days) <input type="checkbox"/>		Electronic Deliverables <input type="checkbox"/>	
										EDD (Specify Type) <input type="checkbox"/>	
										Excel <input type="checkbox"/>	

Print Clearly and Legibly. All Information must be complete.
Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.

Thomas Williams
Samples Collected/Authorized By (Signature)

Thomas Williams
Name (printed)

Matrix Codes		Volatiles		Semi-Vols		Pest/PCB/Herb		Metals		Misc. Org.		Full Lists		Common Miscellaneous Parameters		Special Instruction	
S - soil		8260 full	TICs	8270 or 625	8082PCB	RCRA8	TPH GRO	TPH GRO	Pri. Poll.	Corrosivity	Nitrite	Color					
Other - specify (oil, etc.)		624	Site Spec.	STARS list	8081 Pest	PP13 list	TPH DRO	TPH DRO	TCL Organic	Reactivity	Nitrite	Phenols					
WW - wastewater		STARS list	Nassau Co.	BN Only	8151 Herb	TAL	CT ETPH	CT ETPH	TAL MetCN	Ignitability	TKN	Cyanide-T					
GW - groundwater		BTEX	Suffolk Co.	Acids Only	CT RCP	CT15 list	NY 310-13	NY 310-13	Full TCLP	Flash Point	Tot. Nitrogen	Cyanide-A					
DW - drinking water		MTBE	Ketones	PAH list	App. IX	TAGM list	TPH 1664	TPH 1664	Full App. IX	Sieve Anal.	Ammonia-N	BOD5					
Air-A - ambient air		TCL list	Oxygenates	TAGM list	Site Spec.	NJDEP list	Air TO14A	Air TO14A	Part 360-Routine	Heterotrophs	Chloride	CBOD5					
Air-SV - soil vapor		TAGM list		CT RCP list	SPL Por TCLP	Total	Air TO15	Air TO15	Part 360-Baseline	TOX	Phosphate	BOD28					
		CT RCP list		524.2	TCL list	TCLP Pest	Air STARS	Air STARS	Part 360-Residual	BTU/lb.	Tot. Phos.	COD					
		Arom. only		502.2	NJDEP list	TCLP Herb	Air VPH	Air VPH	Part 360-Residual	Aquatic Tox.	Oil & Grease	TSS					
		Halog. only		NJDEP list	App. IX	Chlordane	Air TICs	Air TICs	NYCDEP Newer	TOC	EC&G	Total Solids					
		App. IX list		SPL Por TCLP	TCLP BNA	608 Pest	Methane	Methane	NYSDDEC Newer	Asbestos	pH	TD5					
		8021B list		SPL Por TCLP	608 PCB	LIST Below	Helium	Helium	TAGM	Silica	MDAS	TPH 1664					

Sample Identification	Date Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
S-022-0018-001	3/2/12 0911	Soil	Area D/Trench 1 North	2oz, 4oz, 8oz
S-023-0038-001	0921		Area D/Trench 1 North	Glass Jars
S-024-0028-001	0945		Area D/Trench 1 North	
S-025-0026-001	0958		Area D/Trench 1 Center	
S-026-0022-001	1010		Area D/Trench 1 Center	
S-027-0024-001	1020		Area D/Trench 1 Center	
S-028-0034-001	1032		Area D/Trench 1 South	
S-029-0022-001	1042		Area D/Trench 1 South	
S-030-0027-001	1103		Area D/Trench 1 South	
S-031-0024-001	1255		Area D/Trench 2 South	

Comments

Three (3) day turn around

Preservation ☒ 4°C ☐ Frozen ☐ HCl ☐ MeOH ☐ HNO₃ ☐ H₂SO₄ ☐ NaOH ☐

Check those Applicable ☐ ZnAc ☐ Ascorbic Acid ☐ Other ☐

Samples Relinquished By

3/4/12 1415

Date/Time

Samples Received By

Date/Time

Samples Relinquished By

3/4/12 1415

Date/Time

Samples Received in LAB by

Date/Time

Temperature on Receipt

____ °C

YORK

ANALYTICAL LABORATORIES, INC.

120 RESEARCH DR. STRATFORD, CT 06615

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YOUR Information (Site) Restoration Company: Environmental Address: 28 Sparta Rd Stanford, NJ Phone No. (601) 727-3316 Contact Person: Thomas Williams E-Mail Address: T.Williams@ERLLC.com		Report To: Company: ER, LLC Address: 288 New Hyde Park Rd Franklin Sq, NY 11016 Phone No. (651) 775-3861 Attention: Karen Merlier E-Mail Address: K.merlier@ERLLC.com	Invoice To: Company: ER, LLC Address: 1666 Fabrick Dr St. Louis, MO 63020 Phone No. Same Attention: Accounts Payable E-Mail Address: Same	YOUR Project ID Mansfield Trail MTA-4a Purchase Order No. 8120 Samples from: CT NY NJ <input checked="" type="checkbox"/> Standard (5-7 Days) <input type="checkbox"/>	Turn-Around Time RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input type="checkbox"/> RUSH - Three Day <input checked="" type="checkbox"/> RUSH - Four Day <input type="checkbox"/>	Report Type/Deliverable Summary Report _____ Summary w/ QA Summary _____ CT RCP Package _____ NY ASP A Package _____ NY ASP B Package _____ Electronic Deliverables: EDD (Specify Type) _____ Excel _____
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Samples will NOT be logged in and the turn-around time
clock will not begin until any questions by York are resolved.

Thomas Williams
Samples Collected/Authorized By (Signature)
Thomas Williams
Name (printed)

Volatiles	Semi-Vols	Pest/PCB/Metals	Misc. Org.	Full Lists	Common	Miscellaneous Parameters	Special Instruction	
8260 full 624 STARS list BTX MTBE TCL list TAGM list CT RCP list Arom. only Halog. only App. IX list 8021B list	TICs Site Spec. Nassau Co. Suffolk Co. Ketones Cyanides 524.2 502.2 NJDEP list SPL Por TCLP 8021B list	8082 PCB 8081 Pest 8151 Herb CT RCP App. IX Site Spec. SPL Por TCLP TCL list NJDEP list TCLP Herb Chlordane 608 Pest 608 PCB	RCRAS PPI3 list TAL CT ET PH CT15 list TAGM list NJDEP list Total Dissolved SPL Por TCLP TCLP Herb Ind. Meth LIST Below Methane Helium	TEH GRO TPH DRO NY 310-13 TPH 1664 Air TO14A Air TO15 Air STARS Air VPH Air TICs NYSDEC Helium	Pri. Poll. TCL Organics TAL Met CN Full TCLP Full App. IX Part 360-Routine Part 360-Residue Part 360-Residue Part 360-Residue NYC DEP NYSDEC Asbestos Silica	Corrosivity Ignitability Flash Point Sieve Anal. Heavy Metals Chloride TOX BTU/lb. Aquatic Tox. TOC Asbestos pH MBAS	Nitrate Nitrite TKN Total Nitrogen Ammonia-N Chloride Phosphate Total Phos. Oil & Grease F.O.G. TDS TPH 1664	Color Phenols Cyanide-T Cyanide-A BOD5 CBOD5 BOD28 COD TSS Total Solids TDS TPH 1664

Sample Identification	Date Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
S-032-0023-001	3/2/12 1311	Soil	Area D/Trench 2 South	202, 402, 802
S-033-0021-001	1323		Area D/Trench 2 South	glass jars
S-034-0018-001	1405		Area D/Trench 2 North	
S-035-0026-001	1420		Area D/Trench 2 North	
S-036-0022-001	1432		Area D/Trench 2 North	
S-037-0025-001	1440		Area D/Trench 2 North	
S-038-0022-001	1505		Area D/Trench 3 North	
S-039-0030-001	1515		Area D/Trench 3 Center	
S-040-0015-001	1512		Area D/Trench 3 South	
S-031-0024-002	1255		Area D/Trench 2 South	

Comments: Three (3) day turn around.

Preservation: 4°C ☒ Frozen ☐ HCl ☐ MeOH ☐ HNO₃ ☐ H₂SO₄ ☐ NaOH ☐
Check those Applicable: ZnAc ☐ Ascorbic Acid ☐ Other ☐

Samples Relinquished By: *Ph* Date/Time: 2/6/12 1415
Samples Relinquished By: *Ph* Date/Time: 2/6/12 1415
Samples Received By: _____ Date/Time: _____
Samples Received in LAB by: _____ Date/Time: _____

Temperature on Receipt: _____ °C

YORK

ANALYTICAL LABORATORIES, INC.

120 RESEARCH DR. STRATFORD, CT 06615
(203) 325-1371 FAX (203) 357-0166**Field Chain-of-Custody Record**Page 1 of 1

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.

This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

York Project No. 12 D0468

YOUR Information		Report To:		Invoice To:		YOUR Project ID		Turn-Around Time		Report Type	
Site Company: <u>Environmental Restoration</u> Address: <u>28 Sparta Rd</u> <u>Stanhope, NJ</u> Phone No: <u>607-727-3316</u> Contact Person: <u>Thomas Williams</u> <u>T.Williams@ERLLC.com</u> E-Mail Address:		Company: <u>ER, LLC</u> Address: <u>Franklin SQ</u> Phone No: <u>860-798-4201</u> Attention: <u>Andrew Charrette</u> <u>a.charrette@ERLLC.com</u> E-Mail Address:		Company: <u>ER, LLC</u> Address: <u>1466 Fabrick Dr</u> <u>St. Louis, MO 63020</u> Phone No: <u>Same</u> Attention: <u>Accounts Payable</u> <u>Same</u> E-Mail Address:		<u>Mansfield Trail</u> <u>MTD-42</u> Purchase Order No. <u>8120</u> Samples from: CT <input type="checkbox"/> NY <input type="checkbox"/> NJ <input type="checkbox"/>		RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input checked="" type="checkbox"/> RUSH - Three Day <input type="checkbox"/> RUSH - Four Day <input type="checkbox"/> Standard (5-7 Days) <input type="checkbox"/>		Summary Report <input type="checkbox"/> Summary w/ QA Summary <input type="checkbox"/> CT RCP Package <input type="checkbox"/> CTRCP DQA/DUE Pkg <input type="checkbox"/> NY ASP A Package <input type="checkbox"/> NY ASP B Package <input type="checkbox"/> NJDEP Red. Deliv. <input type="checkbox"/> Electronic Data Deliverables (EDD) Simple Excel <input type="checkbox"/> NYSDEC EQuIS <input type="checkbox"/> EQuIS (std) <input type="checkbox"/> EZ-EDD (EQuIS) <input type="checkbox"/> NJDEP SRP HazSite EDD <input type="checkbox"/> GIS/KEY (std) <input type="checkbox"/> Other <input type="checkbox"/> York Regulatory Comparison Excel Spreadsheet Compare to the following Regs (please fill in):	

Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.

L. D. Guardie
 Samples Collected/Authorized By (Signature)
Louis D. Guardie
 Name (printed)

Matrix Codes	Volatiles	Semi-Vols.	Pest/PCB/Herb	Metals	Misc. Org.	Full Lists	Misc.	
S - soil Other - specify (oil, etc.) WW - wastewater GW - groundwater DW - drinking water Air-A - ambient air Air-SV - soil vapor	8260 full 624 Site Spec. STARS list BTEN list MTBE TCL list TAGM list CT RCP list Arom. only Halog. only App. IX list 8021B list	TICs Site Spec. Nassau Co. Suffolk Co. Ketones Oxygenates TCLP list 524.2 502.2 NJDEP list SPLP or TCLP	8270 or 625 STARS list BN Only Acids Only PAH list TAGM list CT RCP list TCLP list NJDEP list App. IX TCLP BNA SPLP or TCLP	8082PCB 8081Pest 8151Herb CT RCP App. IX Site Spec. SPLP or TCLP TCLP Pest SPLP or TCLP Chlordane 608 Pest 608 PCB	RCRA8 PP13 list TAL CT15 list TAGM list NJDEP list Total Air STARS Air VPH Air TICs Methane Helium	TPH GRO TPH DRO CT ETPH NY 310-13 TPH 1664 Air TO14A Air TO15 Air STARS Air VPH Air TICs Methane Helium	Pri. Poll. TCL Organics TAL MetCN Full TCLP Full App. IX Part 360 Routine Part 360 Residue Part 360 Residue Part 360 Residue NYDEP Power NYSDEC Sewer TAGM	Corrosivity Reactivity Ignitability Flash Point Sieve Anal. Heterotrophs TOX BTU/lb. Aquatic Tox. TOC Asbestos Silica

Sample Identification	Date Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
MTD-041212-AEAD-01	4/12/12	Soil	Total (Vol., SVol., RCRA 8 metals, PCBs, Herbicides, Pesticides)	glass jar / 1lb 02
MTD-041212-AEAD-02	4/12/12	Soil	AND Full TCLP	glass jar / 1lb 02
			Analysis for Both Samples.	

Comments <u>Two Day Turn Around Time.</u>	Preservation Check those Applicable Special Instructions Field Filtered <input type="checkbox"/> Lab to Filter <input type="checkbox"/>	4°C <input type="checkbox"/> Frozen <input type="checkbox"/> HCl <input type="checkbox"/> MeOH <input type="checkbox"/> ZnAc <input type="checkbox"/> Ascorbic Acid <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> Other <input type="checkbox"/>	Temperature on Receipt <u>3.3 °C</u>
	Samples Relinquished By <u>[Signature]</u> Date/Time <u>4/13/12</u>	Samples Received By <u>[Signature]</u> Date/Time <u>4/13/12 1800</u>	
	Samples Relinquished By _____ Date/Time _____	Samples Received in LAB by _____ Date/Time _____	

Attachment B-4:

NJDEP Soil Cleanup Criteria

**NJDEP Site Remediation Program
Soil Cleanup Criteria**

Contaminant	CASRN	Residential Direct Contact Soil Cleanup Criteria (a) (b)	Non-Residential Direct Contact Soil Cleanup Criteria (a) (b)	Health Based Soil Cleanup Criteria (c)
		(R) (N) (S) (C)	(NR) (D) (S) (C)	(H) (S) (C)
Acenaphthene	83-32-9	3400	10000(c)	100
Acetone (2-propanone)	67-64-1	1000(d)	1000(d)	100
Acrylonitrile	107-13-1	1	5	1
Aldrin	309-00-2	0.04	0.17	50
Anthracene	120-12-7	10000(c)	10000(c)	100
Antimony	7440-36-0	14	340	(b)
Arsenic	7440-38-2	20 (e)	20 (e)	(b)
Barium	7440-39-3	700	47000(n)	(b)
Benzene	71-43-2	3	13	1
Benzo(b)fluoranthene (3,4-Benzofluoranthene)	205-99-2	0.9	4	50
Benzo(a)anthracene (1,2 Benzanthracene)	56-55-3	0.9	4	500
Benzo(a)pyrene (BaP)	50-32-8	0.66(f)	0.66(f)	100
Benzo(k)fluoranthene	207-08-9	0.9	4	500
Benzyl Alcohol	100-51-6	10000(c)	10000(c)	50
Beryllium	7440-41-7	[1(f)] 2 (e)	[1(f)] 2 (e)	(b)
Bis(2-chloroethyl) ether	111-44-4	0.66(f)	3	10
Bis(2-chloroisopropyl) ether	108-60-1	2300	10000(c)	10
Bis(2-ethylhexyl) phthalate	117-81-7	49	210	100
Bromodichloromethane (Dichlorobromomethane)	75-27-4	11	46	1
Bromoform	75-25-2	86	370	1
Bromomethane (Methyl bromide)	74-83-9	79	1000 (d)	1
2-Butanone (Methyl ethyl ketone) (MEK)	78-93-3	1000 (d)	1000 (d)	50
Butylbenzyl phthalate	85-68-7	1100	10000 (c)	100
Cadmium	7440-43-9	[1] 39	100	(b)
Carbon tetrachloride	56-23-5	2 (k)	4 (k)	1
4-Chloroaniline (p-Chloroaniline)	106-47-8	230	4200	(c)
Chlorobenzene	108-90-7	37	680	1
Chloroform	67-66-3	19 (k)	28 (k)	1
4-Chloro-3-methyl phenol (p-Chloro-m-cresol)	59-50-7	10000 (c)	10000 (c)	100
Chloromethane (Methyl chloride)	74-87-3	520	1000 (d)	10
2-Chlorophenol (o-Chlorophenol)	95-57-8	280	5200	10
Chromium - hexavalent (VI)	18540-29-9	240; 270 (g); (i)	6100; 20 (g); (i)	(b)
Chromium - trivalent (III)	16065-83-1	120,000	(f)	(i)
Chrysene	218-01-9	9	40	500
Copper	7440-50-8	600 (m)	600 (m)	(b)
Cyanide	57-12-5	1100	21000 (o)	(b)
4,4'-DDD (p,p'-TDE)	72-54-8	3	12	50
4,4'-DDE (p,p'-DDX)	72-55-9	2	9	50
4,4'-DDT	50-29-3	2	9	500
Dibenz(a,h)anthracene	53-70-3	0.66 (f)	0.66 (f)	100
Dibromochloromethane (Chlorodibromomethane)	124-48-1	110	1000 (d)	1
Di-n-butyl phthalate	84-74-2	5700	10600 (c)	100
Di-n-octyl phthalate	117-84-0	1100	10000 (c)	100
1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	5100	10000 (c)	50
1,3-Dichlorobenzene (m-Dichlorobenzene)	541-73-1	5100	10000 (c)	100
1,4-Dichlorobenzene (p-Dichlorobenzene)	106-46-7	570	10000 (c)	100
3,3'-Dichlorobenzidine	91-94-1	2	6	100
1,1-Dichloroethane	75-34-3	570	1000 (d)	10
1,2-Dichloroethane	107-06-2	6	24	1
1,1-Dichloroethene	75-35-4	8	150	10
1,2-Dichloroethene (trans)	156-60-5	1000 (d)	1000 (d)	50
1,2-Dichloroethene (cis)	156-59-2	79	1000 (d)	1
2,4-Dichlorophenol	120-83-2	170	3100	10
1,2-Dichloropropane	78-87-5	10	43	(c)

Footnotes:

- Criteria are health based using an incidental ingestion exposure pathway except where noted below.
- Criteria are subject to change based on site specific factors (e.g., aquifer classification, soil type, natural background, environmental impact, etc.
- Health based criterion exceeds the 10,000 mg/kg maximum for total organic contaminants.
- Health based criterion exceeds the 1000 mg/kg maximum for total volatile organic contaminants.
- Cleanup standard proposal was based on natural background.
- Health based criterion is lower than analytical limits; cleanup criterion based on practical quantization level.
- Criterion based on the inhalation exposure pathway.
- The impact to ground water values for inorganic constituents will be developed based upon site specific chemical and physical parameters.
- Site specific determination required for SCC for the allergic contact dermatitis exposure pathway.
- Contaminant not regulated for this exposure pathway.
- Criteria based on inhalation exposure pathway, which yielded a more stringent criterion than the incidental ingestion exposure pathway.
- No criterion derived for this contaminant.
- Criterion based on ecological (phytotoxicity) effects.
- Level of the human health based criterion is such that evaluation for potential environmental impacts on a site by site basis is recommended.
- Level of the criterion is such that evaluation for potential acute exposure hazard is recommended.
- Criterion based on the USEPA Integrated Exposure Uptake Biokinetic (IEUBK) model utilizing the default parameters. The concentration is considered to protect 95% of target population (children) at a blood lead level of 10 ug/dl.

Attachment B-5:

Laboratory Validated Data Packets

Attachment C

PERIMETER/EXCAVATION AIR SAMPLING TRIP REPORT

SAMPLING EVENT: Perimeter/Excavation Air Sampling Event
SAMPLE DATES: March 13 to April 12, 2012

1.0 Removal Action Sampling Event Summary:

From March 13 to April 12, 2012, as part of the U.S. Environmental Protection Agency (EPA) Removal Action, Weston Solutions, Inc., Removal Support Team 2 (RST 2) collected a total of 73 air samples, including 14 field blanks, for target compound list (TCL) volatile organic compound (VOC) analysis in accordance with the site-specific Community Air Monitoring Plan (CAMP). Sampling activities were conducted in accordance with EPA Method TO-17 for VOC analysis. As specified in the site-specific health and safety plan, during the sampling event, modified Level D personal protective equipment was worn; including Latex boot covers, gloves, protective eyewear, hard hat, and high visibility safety vest.

2.0 Sample Collection Information:

The following figures and tables provides summaries of the sample collection:
Attachment C-1:

- Figure 10 - Air Monitoring Stations
- Figure 11 - Air Sampling Stations for 03/13/12 – 03/19/12
- Figure 12 - Air Sampling Stations for 03/22/12 – 03/28/12
- Figure 13 - Air Sampling Stations for 03/29/12 – 04/12/12

Attachment C-2:

- Table 8. Air Sample Collection Information
- Table 9. Weather Condition Information for Air Sampling

Table 3-1: Air Station Locations Summaries the air station identification numbers and their location used during air sampling.

3.0 Sampling Methodology:

In order to assess ambient air conditions for VOCs, air stations were established around the periphery of active excavation areas to assess potential impact to off-site areas (i.e. residences). Table 3-1 identifies all established air stations and their location on site and Figure 10 in Attachment C-1 depicts the location of each air sample.

At the EPA On Scene Coordinator's (OSC's) discretion, air samples were also collected during excavation and load-out activities at the Site and analyzed for VOCs via the EPA TO-17 Method. The OSC also made the determination when air samples no longer need to be collected in an area; if results are consistently below action levels or material removal was completed in that area. Air sampling was not conducted when humidity was greater than 80% or when the ground was sufficiently moist following a rain event.

The perimeter air samples were collected using air-sampling SKC pumps with low-flow meters as outlined in Table 3-2. The air samples were shipped overnight to an analytical laboratory for VOC analysis via EPA Method TO-17.

Table 3-1: Air Station Locations

Air Station	Area Location	GPS Location		Air Station	Area Location	GPS Location	
		Lat	Long			Lat	Long
AA-000	Trailer	40.9289443	-74.6995999	AA-011	Area D	40.928829154	-74.69849562
AA-001	Area A	40.928811398	-74.69939583	AA-012	Area E	40.9279432	-74.69870183
AA-002	Area A	40.928933946	-74.699735022	AA-013	Area B	40.92773744	-74.69910042
AA-003	Area A	40.928688507	-74.699791542	AA-014	Area B	40.927540333	-74.69900797
AA-004	Area D	40.92877892	-74.698195177	AA-015	Area C	40.92773320	-74.69870186
AA-005	Area D	40.92926838	-74.697875458	AA-016	Area D	40.929093864	-74.69802289
AA-006	Area D	40.929492812	-74.698092717	AA-017	Area D	40.928717804	-74.69836521
AA-007	Area D	40.92879148	-74.698617266	AA-018	Area D	40.929357089	-74.69768848
AA-008	Area D	40.92923201	-74.697636255	AA-019	Area D	40.929152213	-74.69808214
AA-009	Area E	40.927961174	-74.698284849	AA-020	Area E	40.929522613	-74.69834424
AA-010	Area D	40.92900101	-74.697704075				

Table 3-2: TO-17 Methods Sampling Procedures

Analyte	Sampling Method	Sampling Media	Recommended Flow Rate ^{1*}	Total Volume	Action Level ^{2*}
VOCs	TO-17	Thermal Desorption Tube	0.1000 Liters per min	4 Liters	0.079 ppb ^{3*}

Notes 1* Actual flow rate was determined in the field based on prevailing Site conditions. Humid conditions and precipitation events on Site may require air sampling activities for the day to be cancelled. 2* The action level for TCE is from the Risk-Based Air Concentration Table; Mid-Atlantic Risk Assessment; US EPA. The complete table can be found in Validated Data Tables in Attachment C-5. 3* ppb, = Parts per Billion by Volume

4.0 Personnel Participating in Sampling Event:

Name	Representing	Duties
Lou DiGuardia	EPA, Region II	On-Scene Coordinator
Brittney Kelly	RST 2, Region II	Site Project Manager, Sample Collection, Sample Management, Site Health and Safety
Sean Hettinger	RST 2, Region II	Sample Collection
Mark Conover	RST 2, Region II	Sample Collection

5.0 Laboratory Information:

Sample Matrix	No. of Samples	Analyses	Analyses Method	Laboratory
Air	73	TCL VOCs	TO-17	Columbia Analytical Services, Inc. 2655 Park Center Drive, Suite A Simi Valley, CA 93065

6.0 Sample Dispatch Data:

From March 13 to April 12, 2012, RST 2 delivered air samples via FedEx to Columbia Analytical Services, Inc. laboratory in Simi Valley, California for TCL VOC analyses. Table 3-1 lists the dates shipped, the Airbill Number, and the Chain of Custody (COC) Record Number for the samples that were relinquished to the lab.

Refer to Attachment C-3 for the COC's and Attachment C-4 for the FedEx Airbills.

Table 6-1: Dispatch Information

Date	No. of Samples	FedEx Airbill	Chain of Custody Record Number	Laboratory Shipped To
03/13/12	6	8750 9486 5551	2-031312-173304-0002	Columbia Analytical Services, Inc. 2655 Park Center Drive, Suite A Simi Valley, CA 93065
03/14/12	6	8640 4833 1689	2-031412-194515-0005	
03/15/12	6	8750 9486 5768	2-031512-182913-0007	
03/19/12	6	8640 4833 1690	2-03912-170842-0010	
03/22/12	4	8640 4833 1704	2-032212-140609-0011	
03/23/12	6	8578 5254 5102	2-032312-124758-0012	
03/26/12	6	8578 5254 5113	2-032612-134722-0013	
03/27/12	6	8739 8176 0011	2-032712-152046-0015	
03/28/12	6	8739 8176 0022	2-032812-165122-0017	
03/29/12	5	8739 8176 0033	2-032912-172441-0019	
03/30/12	5	8739 8176 0044	2-033012-135904-0020	
04/03/12	6	8739 8176 0055	2-040312-162203-0021	
04/10/12	6	8739 8176 0066	2-041012-145759-0022	
04/11/12	5	8739 8176 0077	2-041112-113436-0023	
04/12/12	5	8739 8176 0088	2-041212-171459-0024	

7.0 Analytical Results

All results from air sampling were below the criteria specified in the Site Specific CAMP. The activities conducted on site and the results above non-detect for each day sampled are listed below.

Tuesday, March 13, 2012:

- AA-001-031312-001: Dichlorofluoromethane (0.37 ppb_v), Trichlorofluoromethane (0.14 ppb_v), cis-1,2-Dichloroethene (0.13 ppb_v)
- AA-001-031312-002: Dichlorofluoromethane (0.38 ppb_v), Trichlorofluoromethane (0.15 ppb_v)
- AA-002-031312-001: no compounds above detection limits
- AA-002-031312-002: Dichlorofluoromethane (0.10 ppb_v)
- AA-003-031312-001: Dichlorofluoromethane (0.14 ppb_v), cis-1,2-Dichloroethene (0.16 ppb_v), Trichloroethene (0.10 ppb_v)

Wednesday, March 14, 2012:

- AA-000-031412-001: Dichlorofluoromethane (0.30 ppb_v), Trichlorofluoromethane (0.11 ppb_v)
- AA-001-031412-001: Acetone (1.3 ppb_v)
- AA-002-031412-001: no compounds above detection limits
- AA-004-031412-001: Dichlorofluoromethane (0.13 ppb_v)
- AA-005-031412-001: Dichlorofluoromethane (0.31 ppb_v), Trichlorotrifluoroethane (0.11 ppb_v)

Thursday, March 15, 2012:

- AA-006-031512-001: no compounds above detection limits
- AA-007-031512-001: no compounds above detection limits
- AA-008-031512-001: no compounds above detection limits

Monday, March 19, 2012:

- AA-009-031912-001: no compounds above detection limits
- AA-010-031912-001: Dichlorofluoromethane (0.22 ppb_v)
- AA-009-031912-001: no compounds above detection limits

Thursday, March 22, 2012:

- AA-012-032212-001: Toluene (0.22 ppb_v), Chlorobenzene (0.13 ppb_v), n-Decane (0.095 ppb_v)
- AA-013-032212-001: Toluene (0.21 ppb_v)
- AA-014-032212-001: Toluene (0.38 ppb_v), Chlorobenzene (0.19 ppb_v), n-Decane (0.083 ppb_v)

Friday, March 23, 2012:

- AA-009-032312-001: Trichlorofluoromethane (0.23 ppb_v), 2-Butanone (0.18 ppb_v), cis-1,2-Dichloroethene (0.24 ppb_v), Trichloroethene (0.15 ppb_v), 1,1,2-Trichloroethane (0.47 ppb_v), Chlorobenzene (0.42 ppb_v), 3-Ethyltoluene (0.17 ppb_v), 1,2,4-Trimethylbenzene (0.27 ppb_v), 1,4-Dichlorobenzene (0.42 ppb_v), 1,2-Dichlorobenzene (2.4 ppb_v), 1,2,4-Trichlorobenzene (0.092 ppb_v)
- AA-014-032312-001: 1,2-Dichlorobenzene (0.12 ppb_v)
- AA-015-032312-001: Acetone (2.0 ppb_v), 1,2-Dichlorobenzene (0.11 ppb_v)

Monday, March 26, 2012:

- AA-005-032612-001: no compounds above detection limits
- AA-011-032612-001: Dichlorobenzene (0.11 ppb_v)
- AA-016-032612-001: no compounds above detection limits
- AA-017-032612-001: no compounds above detection limits

Tuesday, March 27, 2012:

- AA-006-032712-001: no compounds above detection limits
- AA-009-032712-001: n-Hexane (0.17 ppb_v), Toluene (0.34 ppb_v), n-Octane (0.11 ppb_v), Chlorobenzene (0.17 ppb_v), n-Decane (0.24 ppb_v), 1,2-Dichlorobenzene (0.17 ppb_v)
- AA-017-032712-001: Dichlorofluoromethane (0.096 ppb_v), 1,2-Dichlorobenzene (0.096 ppb_v)
- AA-018-032712-001: no compounds above detection limits

Wednesday, March 28, 2012:

- AA-006-032812-001: no compounds above detection limits
- AA-010-032812-001: no compounds above detection limits
- AA-016-032812-001: no compounds above detection limits

Thursday, March 29, 2012:

- AA-009-032912-001: no compounds above detection limits
- AA-010-032912-001: acetone (1.9 ppb_v), Toluene (0.15 ppb_v), n-Decane (0.25 ppb_v)
- AA-017-032912-001: no compounds above detection limits
- AA-018-032912-001: Dichlorofluoromethane (0.17 ppb_v), Chloroethane (2.0 ppb_v), Benzene (0.25 ppb_v), Toluene (0.25 ppb_v), n-Decane (0.42 ppb_v)

Friday, March 30, 2012:

- AA-000-033012-001: Dichlorofluoromethane (0.11 ppb_v)
- AA-009-033012-001: Dichlorofluoromethane (0.10 ppb_v), n-Hexane (0.92 ppb_v), Bromodichloromethane (0.23 ppb_v), 1,1,2-Trichloromethane (0.23 ppb_v), Chlorobenzene (0.24 ppb_v), m,p-Xylenes (0.26 ppb_v), o-Xylene, (0.17 ppb_v), n-Nonane (0.12 ppb_v), n-Propylbenzene (0.25 ppb_v), 3-Ethyltoluene (0.79 ppb_v), 4-Ethyltoluene (0.37 ppb_v), 1,3,5-Trimethylbenzene (0.56 ppb_v), 2-Ethyltoluene (0.35 ppb_v), 1,2,4-Trimethylbenzene (1.9 ppb_v), n-Decane (0.39 ppb_v), 1,4-Dichlorobenzene (0.091 ppb_v), 1,2,3-Trimethylbenzene (0.047 ppb_v), 1,2,4-Trichlorobenzene (0.41 ppb_v)
- AA-010-033012-001: no compounds above detection limits
- AA-018-033012-001: Dichlorofluoromethane (0.10 ppb_v), cis-1,2-Dichloroethane (0.20 ppb_v), Trichloroethene (0.094 ppb_v), , n-Propylbenzene (0.19 ppb_v), 1,3,5-Trimethylbenzene (0.14 ppb_v), 1,2,4-Trimethylbenzene (0.46 ppb_v), 1,2,3-Trimethylbenzene (0.11 ppb_v)

Tuesday, April 3, 2012:

- AA-011-040312-001: Dichlorofluoromethane (0.24 ppb_v), Vinyl Chloride (0.26 ppb_v), cis-1,2-Dichloroethane (0.92 ppb_v), Trichloroethene (0.12 ppb_v), Toluene (0.16 ppb_v), Chlorobenzene (0.22 ppb_v), o-Xylene, (0.55 ppb_v), n-Nonane (0.092 ppb_v), Cumene (0.34 ppb_v), n-Propylbenzene (0.85 ppb_v), 3-Ethyltoluene (2.1 ppb_v), 4-Ethyltoluene (0.87 ppb_v), 1,3,5-Trimethylbenzene (1.1 ppb_v), 2-

- Ethyltoluene (0.84 ppb_v), 1,2,4-Trimethylbenzene (3.8 ppb_v), n-Decane (0.29 ppb_v), 1,4-Dichlorobenzene (0.12 ppb_v), 1,2,3-Trimethylbenzene (0.94 ppb_v), 1,2-Dichlorobenzene (0.59 ppb_v)
- AA-017-040312-001: cis-1,2-Dichloroethane (0.19 ppb_v), n-Propylbenzene (0.12 ppb_v), 3-Ethyltoluene (0.30 ppb_v), 4-Ethyltoluene (0.13 ppb_v), 1,3,5-Trimethylbenzene (0.16 ppb_v), 2-Ethyltoluene (0.12 ppb_v), 1,2,4-Trimethylbenzene (0.55 ppb_v), 1,2,3-Trimethylbenzene (0.13 ppb_v)
 - AA-017-040312-002: 3-Ethyltoluene (0.13 ppb_v), 1,2,4-Trichlorobenzene (0.30 ppb_v)
 - AA-018-040312-001: Acetone (1.1 ppb_v)
 - AA-019-040312-001: Dichlorofluoromethane (0.17 ppb_v), Vinyl Chloride (0.27 ppb_v), Acetone (0.15 ppb_v), cis-1,2-Dichloroethane (2.0 ppb_v), Trichloroethene (0.18 ppb_v), Toluene (0.56 ppb_v), n-Octane (0.23 ppb_v), Chlorobenzene (0.96 ppb_v), Ethylbenzene (0.12 ppb_v), m,p-Xylenes (0.52 ppb_v), o-Xylene, (1.2 ppb_v) n-Nonane (0.67 ppb_v), Cumene (0.81 ppb_v), n-Propylbenzene (2.6 ppb_v), 3-Ethyltoluene (7.9 J ppb_v), 4-Ethyltoluene (3.5 ppb_v), 1,3,5-Trimethylbenzene (4.7 ppb_v), 2-Ethyltoluene (3.5 ppb_v), 1,2,4-Trimethylbenzene (18 J ppb_v), n-Decane (2.0 ppb_v), 1,4-Dichlorobenzene (0.29 ppb_v), 4-Isopropyltoluene (0.42 ppb_v), 1,2,3-Trimethylbenzene (4.2 ppb_v), 1,2-Dichlorobenzene (1.2 ppb_v), Naphthalene (0.14 ppb_v)

Tuesday, April 10, 2012:

- AA-010-041012-001: Acetone (1.3 ppb_v), n-Hexane (0.15 ppb_v), n-Octane (0.12 ppb_v), n-Decane (0.31 ppb_v)
- AA-010-041012-002: Acetone (2.3 ppb_v), n-Hexane (0.77 ppb_v)
- AA-017-041012-001: Acetone (1.8 ppb_v), n-Hexane (0.15 ppb_v), Toluene (0.12 ppb_v), n-Octane (0.20 ppb_v), n-Decane (0.46 ppb_v)
- AA-017-041012-002: Trichloroethene (0.098 ppb_v)
- AA-018-041012-001: Dichlorofluoromethane (0.095 ppb_v), Acetone (1.2 ppb_v), cis-1,2-Dichloroethene (1.7 ppb_v), n-Hexane (0.21 ppb_v), Trichloroethene (0.72 ppb_v), Toluene (0.31 ppb_v), n-Octane (0.15 ppb_v), Chlorobenzene (0.46 ppb_v), 3-Ethyltoluene (0.21 ppb_v), 4-Ethyltoluene (0.11 ppb_v), 1,3,5-Trimethylbenzene (0.15 ppb_v), 2-Ethyltoluene (0.11 ppb_v), 1,2,4-Trimethylbenzene (0.49 ppb_v), n-Decane (0.31 ppb_v), 1,4-Dichlorobenzene (0.17 ppb_v), 1,2,3-Trimethylbenzene (0.16 ppb_v), 1,2-Dichlorobenzene (0.71 ppb_v)

Wednesday, April 11, 2012:

- AA-010-041112-001: Acetone (1.3 ppb_v), n-Hexane (0.77 ppb_v), n-Decane (0.46 ppb_v)
- AA-011-041112-001: Dichlorofluoromethane (0.29 ppb_v), Acetone (1.3 ppb_v), Trichlorofluoromethane (0.12 ppb_v), Methylene Chloride (0.61 ppb_v), 1,1-Dichloroethane (0.49 ppb_v), 2-Butanone (0.17 J ppb_v), cis-1,2-Dichloroethene (13 J ppb_v), n-Hexane (0.20 ppb_v), Chloroform (0.24 ppb_v), Trichloroethene (8.0 J ppb_v), Toluene (1.9 ppb_v), Tetrachloroethene (2.5 ppb_v), o-Xylene (0.11 ppb_v), n-Nonane (0.14 ppb_v), n-Propylbenzene (0.11 ppb_v), 3-Ethyltoluene (0.29 ppb_v), 4-Ethyltoluene (0.14 ppb_v), 1,3,5-Trimethylbenzene (0.21 ppb_v), 2-Ethyltoluene (0.13 ppb_v), 1,2,4-Trimethylbenzene (0.68 ppb_v), n-Decane (0.67 ppb_v), 1,4-Dichlorobenzene (1.6 ppb_v), 4-Isopropyltoluene (0.090 ppb_v), 1,2,3-Trimethylbenzene (0.22 ppb_v), 1,2-Dichlorobenzene (6.7 J ppb_v)
- AA-012-041112-001: Acetone (1.8 ppb_v), n-Hexane (0.15 ppb_v), Trichloroethene (0.15 J ppb_v), Toluene (0.18 ppb_v), n-Decane (0.40 ppb_v), 1,2-Dichlorobenzene (0.19 ppb_v)
- AA-020-041112-001: no compounds above detection limits

Thursday, April 12, 2012:

- AA-000-041212-001: Acetone (2.2 ppb_v), Benzene (0.35 ppb_v)
- AA-011-041212-001: Acetone (10 ppb_v), 2-Butanone (0.67 J ppb_v), n-Hexane (6.0 ppb_v), Benzene (0.41 ppb_v), Trichloroethene (0.17 J ppb_v), Toluene (2.0 ppb_v), n-Octane (0.24 ppb_v), 3-Ethyltoluene (0.27 ppb_v), 1,2,4-Trimethylbenzene (0.51 ppb_v), 1,2-Dichlorobenzene (0.29 ppb_v)
- AA-017-041212-001: Dichlorofluoromethane (0.27 ppb_v), Acetone (3.3 ppb_v), cis-1,2-Dichloroethene (4.6 ppb_v), Benzene (0.22 ppb_v), Trichloroethene (0.54 ppb_v), Chlorobenzene (0.75 ppb_v), o-Xylene (0.40 ppb_v), Cumene (0.24 ppb_v), n-Propylbenzene (0.65 ppb_v), 3-Ethyltoluene (1.6 ppb_v), 4-Ethyltoluene (0.75 ppb_v), 1,3,5-Trimethylbenzene (0.84 ppb_v), 2-Ethyltoluene (0.64 ppb_v), 1,2,4-Trimethylbenzene (3.0 ppb_v), 1,4-Dichlorobenzene (0.49 ppb_v), 1,2,3-Trimethylbenzene (0.80 ppb_v), 1,2-Dichlorobenzene (2.2 ppb_v)
- AA-021-041212-001: : Acetone (2.1 ppb_v)

Refer to Attachment C-2 tables for complete summary of results.

Attachment C-2:

- Table 10 - Air Analytical Summary Table for 03/13/12 – 03/19/12
- Table 11 - Air Analytical Summary Table for 03/22/12 – 03/28/12
- Table 12 - Air Analytical Summary Table for 03/29/12 – 04/12/12

Attachment C-1:

Figures

Figure 10 – Air Monitoring Stations

Figure 11 – Air Sampling for 03/13/12 – 03/19/12

Figure 12 – Air Sampling for 03/22/12 – 03/28/12

Figure 13 – Air Sampling for 03/29/12 – 04/12/12



Legend

- Air Monitoring Station
- Access Road
- Dump Area
- Area D Trenches



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AVATAR ENVIRONMENTAL, LLC.

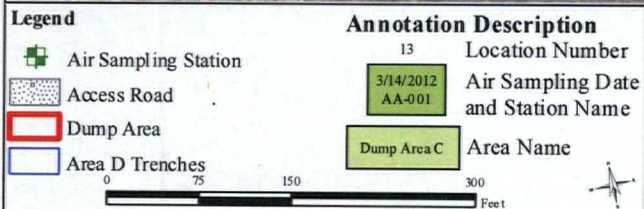
Figure 10

Air Monitoring Stations

MANSFIELD TRAIL DUMP
BYRAM TOWNSHIP NEW JERSEY
U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM 2
CONTRACT # EP-W-06-072

DRAWN BY:	P. LISICHENKO
EPA OSC:	L. DEGUARDIA
RST SPM:	B. KELLY
FILE NAME:	MTD Air Monitoring Stations Overview.mxd

DATE MODIFIED: 8/17/2012



Weston Solutions, Inc.
Northeast Division

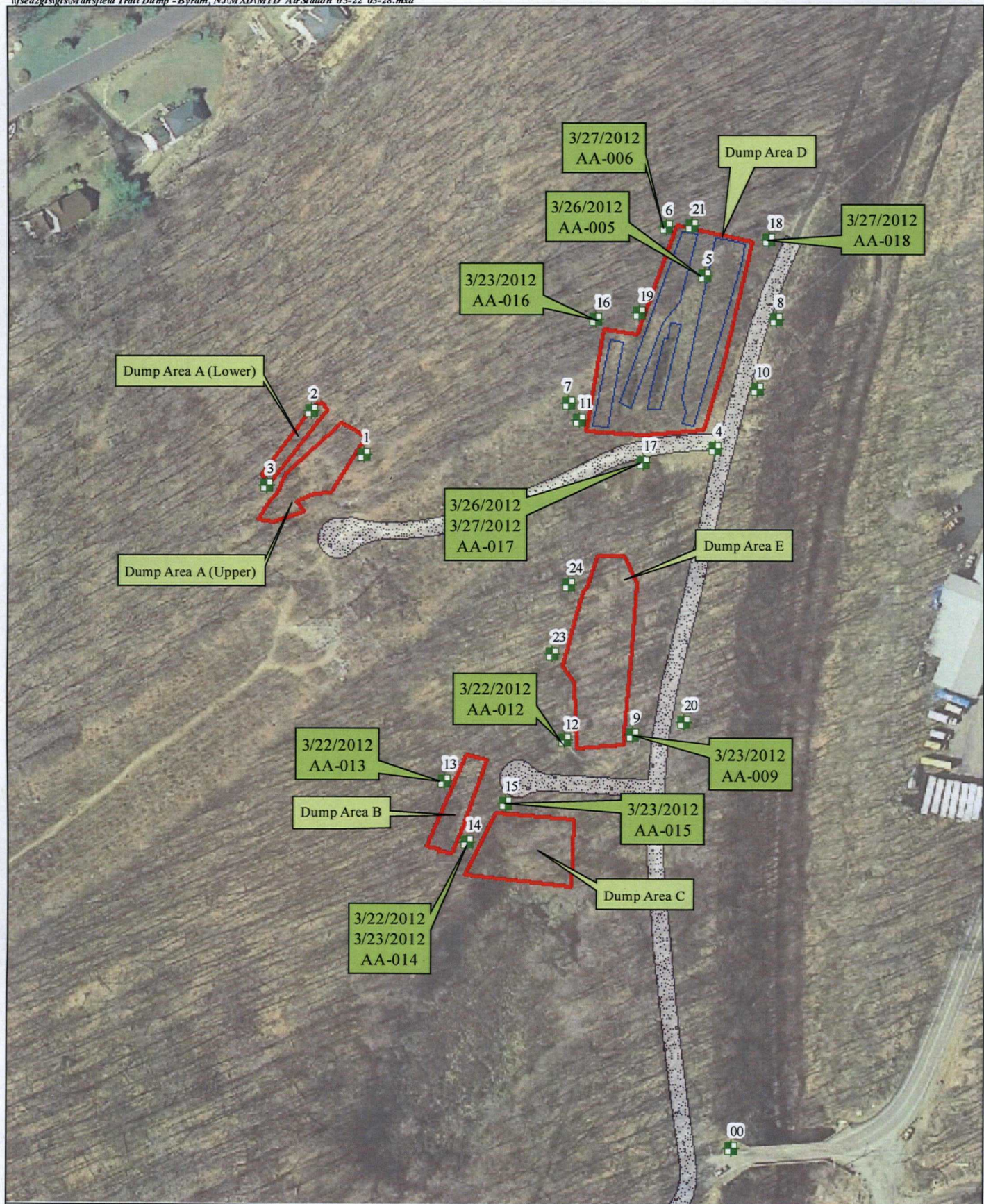
IN ASSOCIATION WITH
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AVATAR ENVIRONMENTAL, LLC.

**Figure 11: Air Sampling Stations
3/13/2012 - 3/19/2012**

**MANSFIELD TRAIL DUMP
BYRAM TOWNSHIP NEW JERSEY**
U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM 2
CONTRACT # EP-W-06-072

DRAWN BY:	P. LESCHENKO
EPA OSC:	L. DI GUARDIA
RST SPM:	B. KELLY
FILE NAME:	MTD AirStation 03-13 04-19.mxd

DATE MODIFIED: 8/17/2012

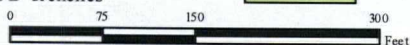


Legend

- Air Sampling Station
- Access Road
- Dump Area
- Area D Trenches

Annotation Description

- | | |
|---------------------|---------------------------------------|
| 13 | Location Number |
| 3/14/2012
AA-001 | Air Sampling Date
and Station Name |
| Dump Area C | Area Name |



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AVATAR ENVIRONMENTAL, LLC.

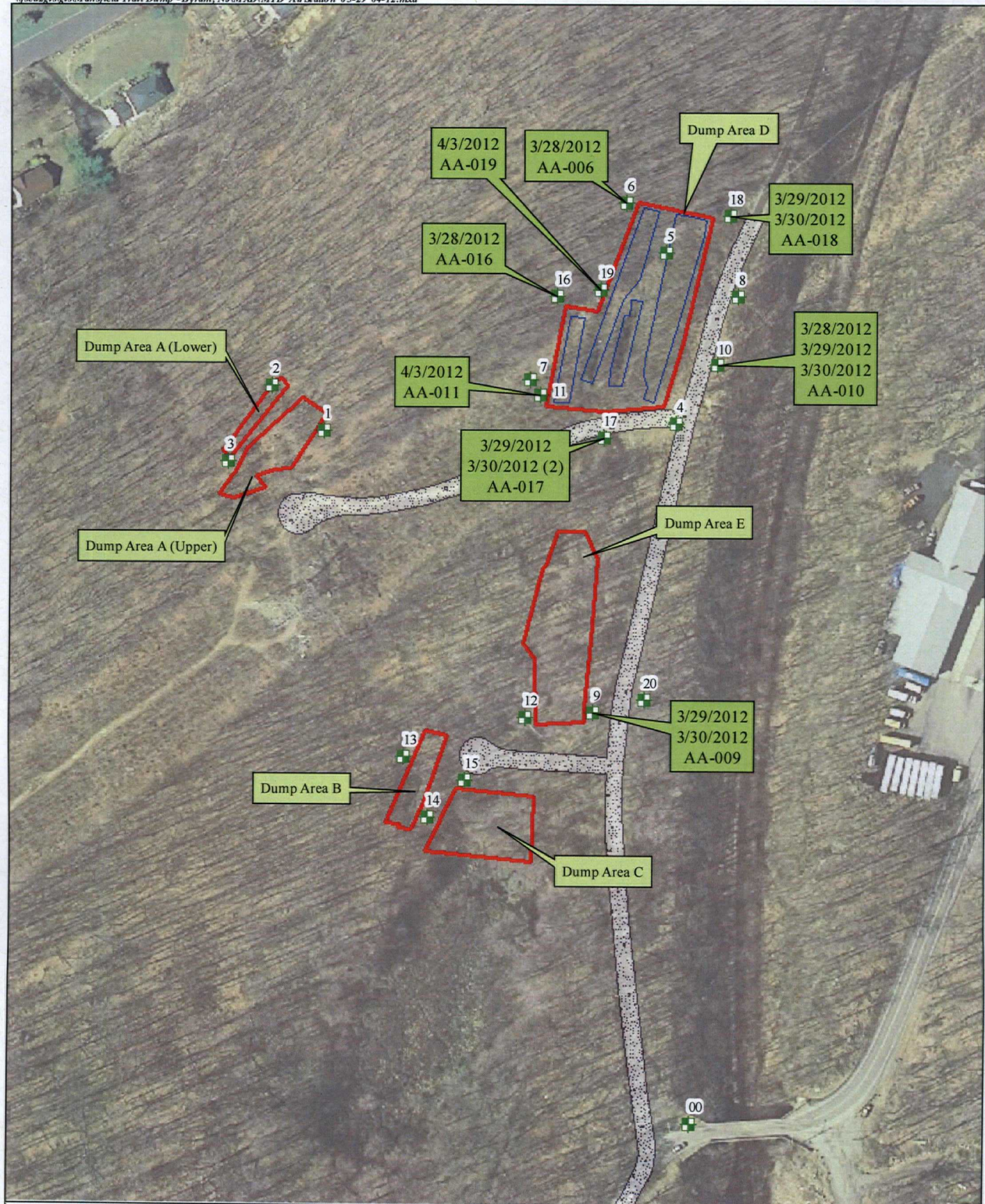
Figure 12: Air Sampling Stations
3/22/2012 - 3/28/2012

MANSFIELD TRAIL DUMP
BYRAM TOWNSHIP, NEW JERSEY

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM 2
CONTRACT # EP-W-06-072

DRAWN BY:	P. LISICHENKO
EPA OSC:	J. DEGUARDIA
RST SPM:	B. KELLY
FILE NAME:	MTD Air Station 03-22 03-28.mxd

DATE MODIFIED: 8/17/2012

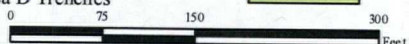


Legend

- Air Sampling Station
- Access Road
- Dump Area
- Area D Trenches

Annotation Description

- 13 Location Number
- 3/14/2012 AA-001 Air Sampling Date and Station Name
- Dump Area C Area Name



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Figure 13: Air Sampling Stations
3/29/2012 - 4/12/2012

MANSFIELD TRAIL DUMP
BYRAM TOWNSHIP NEW JERSEY
U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM 2
CONTRACT # EP-W-06-072

DATE MODIFIED: 8/17/2013	DR. BY: P. LISCHENKO
	EPA OSC: L. DIGUARDIA
	RST SPM: B. KELLY
	FILENAME: MT D Air Station 03-29 04-12.mxd

Attachment C-2

Table 8. – Air Sample Collection Information

Table 9. – Weather Condition Information for Air Sampling

Table 10. – Air Analytical Summary Table for 03/13/12 – 03/19/12

Table 11. – Air Analytical Summary Table for 03/22/12 – 03/28/12

Table 12. – Air Analytical Summary Table for 03/29/12 – 04/12/12

Table 8.
Air Sample Collection Information

Sample #	Location	Sub Location	Pump #	Sample Date	Volume (L)	Start Time	Stop Time	Total Time (min)	Average Flow Rate (mL/min)
AA-000-031412-001	AA-000	Outside Site Trailer	1	3/14/2012	4	9:36:00 AM	10:16:00 AM	40	0.1085
AA-000-033012-001	AA-000	Outside Site Trailer	2	3/30/2012	3.9	8:04:00 AM	8:44:00 AM	40	0.0975
AA-001-031312-001	AA-001	Dump Area A Lower	2	3/13/2012	4.01	11:22:00 AM	11:42:00 AM	40	0.1003
AA-001-031312-002	AA-001	Dump Area A Lower	2	3/13/2012	4.03	2:11:00 PM	2:51:00 PM	40	0.1007
AA-001-031412-001	AA-001	Area A	2	3/14/2012	4.01	10:27:00 AM	11:05:00 AM	40	0.1003
AA-002-031312-001	AA-002	Dump Area A Lower	3	3/13/2012	4	11:15:00 AM	11:55:00 AM	40	0.0999
AA-002-031312-002	AA-002	Dump Area A Lower	3	3/13/2012	3.99	2:08:00 PM	2:48:00 PM	40	0.0997
AA-002-031412-001	AA-002	Area A	3	3/14/2012	4	10:31:00 AM	11:09:00 AM	40	0.0999
AA-003-031312-001	AA-003	Dump Area A Lower	2	3/13/2012	4.1	11:17:00 AM	11:57:00 AM	40	0.1025
AA-004-031412-001	AA-004	Area D	4	3/14/2012	4	2:15:00 PM	2:55:00 PM	40	0.15
AA-005-031412-001	AA-005	Area D	5	3/14/2012	4	2:06:00 PM	2:46:00 PM	40	0.076
AA-005-032612-001	AA-005	Dump Area D NE	1	3/26/2012	4.29	10:10:00 AM	10:50:00 AM	40	0.1072
AA-006-031512-001	AA-006	Area D	1	3/15/2012	4.01	10:09:00 AM	10:49:00 AM	40	0.1072
AA-006-032712-001	AA-006	Dump Area D NW	2	3/27/2012	4.38	1:29:00 PM	2:09:00 PM	40	0.1094
AA-006-032812-001	AA-006	Area D NW	2	3/28/2012	3.81	10:10:00 AM	10:50:00 AM	40	0.0952
AA-007-031512-001	AA-007	Area D	1	3/15/2012	4.01	10:13:00 AM	10:53:00 AM	40	0.1072
AA-008-031512-001	AA-008	Area D	3	3/15/2012	4.01	10:07:00 AM	10:47:00 AM	40	0.1017
AA-009-031912-001	AA-009	Dump Area E	1	3/19/2012	4	2:20:00 PM	3:00:00 PM	40	0.1009
AA-009-032312-001	AA-009	Dump Area E	4	3/23/2012	3.97	12:10:00 PM	12:50:00 PM	40	0.0993
AA-009-032712-001	AA-009	Dump Area E	3	3/27/2012	4.35	9:40:00 AM	10:15:00 AM	35	0.1242
AA-009-032912-001	AA-009	Dump Area E	1	3/29/2012	4.07	9:57:00 AM	10:37:00 AM	40	0.1017
AA-009-033012-001	AA-009	Dump Area E	2	3/30/2012	3.9	11:54:00 AM	12:34:00 PM	40	0.0975
AA-010-03012-001	AA-010	Area D SE	3	3/30/2012	4.03	12:10:00 PM	12:50:00 PM	40	0.1008
AA-010-031912-001	AA-010	Dump Area D SE	4	3/19/2012	4.42	2:14:00 PM	2:50:00 PM	36	0.1229
AA-010-032812-001	AA-010	Area D SE	3	3/28/2012	4.11	10:16:00 AM	10:56:00 AM	40	0.1028
AA-010-032912-001	AA-010	Area D SE	3	3/29/2012	3.59	10:05:00 AM	10:40:00 AM	35	0.1026
AA-011-031912-001	AA-011	Dump Area D SW	3	3/19/2012	3.71	2:17:00 PM	2:57:00 PM	40	0.0928
AA-011-032612-001	AA-011	Dump Area D SW	5	3/26/2012	4.13	10:20:00 AM	11:00:00 AM	40	0.1033

Table 8.
Air Sample Collection Information

Sample #	Location	Sub Location	Pump #	Sample Date	Volume (L)	Start Time	Stop Time	Total Time (min)	Average Flow Rate (mL/min)
AA-011-040312-001	AA-011	Dump Area D SW	4	4/3/2012	4.56	10:46:00 AM	11:30:00 AM	44	0.1037
AA-012-032212-001	AA-012	Dump Area B NW	2	3/22/2012	4.26	12:27:00 PM	1:07:00 PM	40	0.1066
AA-013-032212-001	AA-013	Dump Area B W	4	3/22/2012	4.22	12:31:00 PM	1:11:00 PM	40	0.1054
AA-014-032312-001	AA-014	Dump Area B SE	3	3/23/2012	3.78	12:15:00 PM	12:55:00 PM	40	0.0944
AA-015-032312-001	AA-015	Dump Area C NE	2	3/23/2012	4	12:06:00 PM	12:46:00 PM	40	0.1001
AA-016-032612-001	AA-016	Dump Area D W	6	3/26/2012	4.04	10:25:00 AM	11:05:00 AM	40	0.1009
AA-016-032812-001	AA-016	Area D DW	4	3/28/2012	4.3	10:22:00 AM	11:02:00 AM	40	0.1076
AA-017-032612-001	AA-017	Dump Area D S	2	3/26/2012	3.98	10:15:00 AM	10:55:00 AM	40	0.0995
AA-017-032712-001	AA-017	Dump Area D S	3	3/27/2012	4.52	1:25:00 PM	2:05:00 PM	40	0.113
AA-017-032912-001	AA-017	Dump Area D S	4	3/29/2012	3.96	10:02:00 AM	10:42:00 AM	40	0.099
AA-017-040312-001	AA-017	Dump Area D S	3	4/3/2012	4.16	10:40:00 AM	11:20:00 AM	40	0.1039
AA-017-040312-002	AA-017	Dump Area D S	3	4/3/2012	4.25	2:00:00 PM	2:40:00 PM	40	0.1062
AA-018-032712-001	AA-018	Dump Area D NE	4	3/27/2012	3.96	1:35:00 PM	2:15:00 PM	40	0.0991
AA-018-032912-001	AA-018	Dump Area D NE	4	3/29/2012	3.52	10:08:00 AM	10:42:00 AM	34	0.1034
AA-018-033012-001	AA-018	Dump Area D NE	4	3/30/2012	4	12:05:00 PM	12:45:00 PM	40	0.1
AA-018-040312-001	AA-018	Dump Area D NE	2	4/3/2012	3.77	1:50:00 PM	2:35:00 PM	45	0.0837
AA-019-040312-001	AA-019	Area D NW	4	4/3/2012	4.2	2:08:00 PM	2:48:00 PM	40	0.1049
AA-000-041212-001	AA-000	Outside Site Trailer	3	4/12/2012	4.26	2:00:00 PM	2:35:00 PM	35	0.1218
AA-010-041012-001	AA-010	Area D SE	2	4/10/2012	3.99	12:18:00 PM	12:58:00 PM	40	0.0998
AA-010-041012-002	AA-010	Dump Area D SE	2	4/10/2012	3.99	1:00:00 PM	1:40:00 PM	40	0.0998
AA-010-041112-001	AA-010	Area D SE	2	4/11/2012	3.96	8:15:00 AM	8:55:00 AM	40	0.0989
AA-011-041112-001	AA-011	Dump Area D SW	3	4/11/2012	4.22	8:20:00 AM	9:05:00 AM	45	0.0937
AA-011-041212-001	AA-011	Outside Site Trailer	2	4/12/2012	2.44	10:30:00 AM	11:10:00 AM	40	0.0611
AA-012-041112-001	AA-012	Dump Area e SW	3	4/11/2012	4.15	10:05:00 AM	10:45:00 AM	40	0.1038
AA-017-041012-001	AA-017	Dump Area D S	4	4/10/2012	4.32	12:20:00 PM	1:00:00 PM	40	0.1079
AA-017-041012-002	AA-017	Dump Area D S	4	4/10/2012	4.32	1:00:00 PM	1:40:00 PM	40	0.1079
AA-017-041212-001	AA-017	Outside Site Trailer	5	4/12/2012	2.96	10:33:00 AM	11:13:00 AM	40	0.0741
AA-018-041012-001	AA-018	Dump Area D NE	3	4/10/2012	4.36	12:15:00 PM	12:55:00 PM	40	0.109

Table 8.
Air Sample Collection Information

Sample #	Location	Sub Location	Pump #	Sample Date	Volume (L)	Start Time	Stop Time	Total Time (min)	Average Flow Rate (mL/min)
AA-020-041112-001	AA-020	Dump Area E E	2	4/11/2012	4.08	10:00:00 AM	10:40:00 AM	40	0.102
AA-021-041212-001	AA-021	Area D N	3	4/12/2012	3.71	10:37:00 AM	11:17:00 AM	40	0.0928
FB-031312-001	AA-000	Outside Site Trailer	NA	3/13/2012	NA	7:30:00 AM	NA	NA	NA
FB-031512-001	AA-000	Outside Site Trailer	NA	3/15/2012	NA	7:30:00 AM	NA	NA	NA
FB-031912-001	AA-000	Outside Site Trailer	NA	3/19/2012	NA	3:15:00 PM	NA	NA	NA
FB-032212-001	AA-000	Outside Site Trailer	NA	3/22/2012	NA	7:30:00 AM	NA	NA	NA
FB-032312-001	AA-000	Outside Site Trailer	NA	3/23/2012	NA	7:30:00 AM	NA	NA	NA
FB-032612-001	AA-000	Outside Site Trailer	NA	3/26/2012	NA	7:30:00 AM	NA	NA	NA
FB-032712-001	AA-000	Outside Site Trailer	NA	3/27/2012	NA	7:30:00 AM	NA	NA	NA
FB-032812-001	AA-000	Outside Site Trailer	NA	3/28/2012	NA	7:30:00 AM	NA	NA	NA
FB-032912-001	AA-000	Outside Site Trailer	NA	3/29/2012	NA	9:30:00 AM	NA	NA	NA
FB-033012-001	AA-000	Outside Site Trailer	NA	3/30/2012	NA	8:30:00 AM	NA	NA	NA
FB-040312-001	AA-000	Outside Site Trailer	NA	4/3/2012	NA	8:30:00 AM	NA	NA	NA
FB-041012-001	AA-000	Outside Site Trailer	NA	4/10/2012	NA	10:00:00 AM	NA	NA	NA
FB-041112-001	AA-000	Outside Site Trailer	NA	4/11/2012	NA	8:00:00 AM	NA	NA	NA
FB-041212-001	AA-000	Outside Site Trailer	NA	4/12/2012	NA	8:00:00 AM	NA	NA	NA

Notes: L - Liter; min - minute; mL/min - milliliter per minute; wind direction (N - north, E - east, S - south, W - west); NA - not applicable;
FB - field blank

Table 9.
Air Sampling Weather Condition Information

Date	Time	Temperature (F)	Humidity (%)	To Wind Direction	Wind Speed (mph)	Sky Conditions	Samples Collected
3/13/2012	0800 hrs	53.8	83%	SW	0.7	Clear/Sunny	Yes
	1200 hrs	70.9	48%	N	0.7		
	1500 hrs	70.9	48%	NE	1.3		
3/14/2012	0800 hrs	49.6	49.60%	NW	0.2	Clear/Sunny	Yes
	1200 hrs	65.5	65.50%	SE	1.6		
	1500 hrs	68.7	68.70%	E	1.8		
3/15/2012	0800 hrs	42.8	86%	E	1.3	Clear/Sunny	Yes
	1200 hrs	46	72%	E	2.9		
	1500 hrs	52.5	60%	E	3.6		
3/16/2012	0800 hrs	46.2	86%	S	1.2	Cloudy/Fog	No
	1200 hrs	44.8	93%	NE	0.2		
	1500 hrs	52	73%	E	1.2		
3/19/2012	0800 hrs	55	96%	N.A.	0	Clear /Sunny	Yes
	1200 hrs	68	65%	NE	6		
	1500 hrs	72	49%	NE	7		
3/20/2012	0800 hrs	55	89%	N	1	Clear/Sunny	No
	1200 hrs	70	59%	N	5		
	1500 hrs	77	47%	N	5		
3/21/2012	0800 hrs	57.9	93%	NW	0.7	Clear/Sunny	No
	1200 hrs	60.3	88%	NWW	1.8		
	1500 hrs	62.8	79%	NW	1.6		
3/22/2012	0800 hrs	53.8	83%	SW	0.7	Clear/Sunny	Yes
	1200 hrs	70.9	48%	N	0.7		
	1500 hrs	70.9	48%	NE	1.3		
3/23/2012	0800 hrs	49.6	49.60%	NW	0.2	Clear/Sunny	Yes
	1200 hrs	65.5	65.50%	SE	1.6		
	1500 hrs	68.7	68.70%	E	1.8		
3/26/2012	0800 hrs	42.8	86%	E	1.3	Clear/Sunny	Yes
	1200 hrs	46	72%	E	2.9		
	1500 hrs	52.5	60%	E	3.6		
3/27/2012	0800 hrs	46.2	86%	S	1.2	Clear/Sunny	Yes
	1200 hrs	44.8	93%	NE	0.2		
	1500 hrs	52	73%	E	1.2		
3/29/2012	0800 hrs	41	80%	SE	1.8	Clear/Sunny	Yes
	1200 hrs	48.2	65%	E	2		
	1500 hrs	56.7	50%	SE	2.3		
3/30/2012	0800 hrs	46.2	75%	E	0.4	Scattered Clouds	Yes
	1200 hrs	55	40%	SE	1.1		
	1500 hrs	48.1	38%	E	1.5		
4/3/2012	0800 hrs	38	73%	NW	1	Clear/Sunny	Yes
	1200 hrs	51.1	19%	SSE	1.6		
	1500 hrs	63.5	12%	ESE	1.8		

Table 9.
Air Sampling Weather Condition Information

Date	Time	Temperature (F)	Humidity (%)	To Wind Direction	Wind Speed (mph)	Sky Conditions	Samples Collected
4/10/2012	0800 hrs	43.3	54%	W	0.4	Clear/Sunny	Yes
	1200 hrs	65.3	50%	W	0		
	1500 hrs	53.1	52%	W	1		
4/11/2012	0800 hrs	41.5	55%	NW	1.1	Clear/Sunny	Yes
	1200 hrs	50.5	34%	W	1.6		
	1500 hrs	50	42%	W	1.8		
4/12/2012	0800 hrs	43.5	63%	NW	1.1	Clear/Sunny	Yes
	1200 hrs	55.8	40%	NW	1.9		
	1500 hrs	53.1	42%	NW	1.1		

Notes: hrs - hours; F - degrees Fahrenheit; wind direction (N - north, E - east, S - south, W - west);
mph - miles per hour, % - percent

Data for the above weather conditions were collected by United States Coast Guard onsite utilizing an on-site mobile weather station. The humidity measurements highlighted in bold are above 80% humidity. Air samples were not collected above this parameter. Samples collected on days during high humidity were collected once humidity dropped below 80%.

CHEMI CAL_NAME	RESULT VALUE	METHOD_D TECTION_L IMIT	REPORTING_ DETECTION_L IMIT	QUANTIT ATION_LI MIT	RESU LT_U NIT	DETECTIO N_LIMIT_U NIT	TIC_RETE NTION_TI ME
Aluminum	200	5.1	200	200	ug/L	ug/L	
Antimony	60.0	1.6	60.0	60.0	ug/L	ug/L	
Arsenic	10.0	0.66	10.0	10.0	ug/L	ug/L	
Barium	200	0.24	200	200	ug/L	ug/L	
Beryllium	5.0	0.036	5.0	5.0	ug/L	ug/L	
Cadmium	5.0	0.35	5.0	5.0	ug/L	ug/L	
Calcium	67.0	33.0	5000	5000	ug/L	ug/L	
Chromium	10.0	1.3	10.0	10.0	ug/L	ug/L	
Cobalt	50.0	0.13	50.0	50.0	ug/L	ug/L	
Copper	25.0	0.83	25.0	25.0	ug/L	ug/L	
Iron	2.9	2.0	100	100	ug/L	ug/L	
Lead	10.0	1.6	10.0	10.0	ug/L	ug/L	
Magnesium	6.8	4.3	5000	5000	ug/L	ug/L	
Manganese	15.0	0.14	15.0	15.0	ug/L	ug/L	
Mercury	0.17	0.016	0.20	0.20	ug/L	ug/L	
Nickel	40.0	0.91	40.0	40.0	ug/L	ug/L	
Potassium	5000	17.0	5000	5000	ug/L	ug/L	
Selenium	35.0	0.82	35.0	35.0	ug/L	ug/L	
Silver	10.0	1.4	10.0	10.0	ug/L	ug/L	
Sodium	150	12.0	5000	5000	ug/L	ug/L	
Thallium	25.0	1.0	25.0	25.0	ug/L	ug/L	
Vanadium	50.0	1.2	50.0	50.0	ug/L	ug/L	
Zinc	8.4	0.19	60.0	60.0	ug/L	ug/L	

Table 9.
Air Sampling Weather Condition Information

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3/13/2012	0800 hrs	53.8	83%	SW	0.7	Clear/Sunny	Yes
	1200 hrs	70.9	48%	N	0.7		
	1500 hrs	70.9	48%	NE	1.3		
3/14/2012	0800 hrs	49.6	49.60%	NW	0.2	Clear/Sunny	Yes
	1200 hrs	65.5	65.50%	SE	1.6		
	1500 hrs	68.7	68.70%	E	1.8		
3/15/2012	0800 hrs	42.8	86%	E	1.3	Clear/Sunny	Yes
	1200 hrs	46	72%	E	2.9		
	1500 hrs	52.5	60%	E	3.6		
3/16/2012	0800 hrs	46.2	86%	S	1.2	Cloudy/Fog	No
	1200 hrs	44.8	93%	NE	0.2		
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3/19/2012	0800 hrs	55	96%	N.A.	0	Clear /Sunny	Yes
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3/20/2012	0800 hrs	55	89%	N	1	Clear/Sunny	No
	1200 hrs	70	59%	N	5		
	1500 hrs	77	47%	N	5		
3/21/2012	0800 hrs	57.9	93%	NW	0.7	Clear/Sunny	No
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3/27/2012	0800 hrs	46.2	86%	S	1.2	Clear/Sunny	Yes
	1200 hrs	44.8	93%	NE	0.2		
	1500 hrs	52	73%	E	1.2		
3/29/2012	0800 hrs	41	80%	SE	1.8	Clear/Sunny	Yes
	1200 hrs	48.2	65%	E	2		
	1500 hrs	56.7	50%	SE	2.3		
3/30/2012	0800 hrs	46.2	75%	E	0.4	Scattered Clouds	Yes
	1200 hrs	55	40%	SE	1.1		
	1500 hrs	48.1	38%	E	1.5		
4/3/2012	0800 hrs	38	73%	NW	1	Clear/Sunny	Yes
	1200 hrs	51.1	19%	SSE	1.6		
	1500 hrs	63.5	12%	ESE	1.8		

Table 9.
Air Sampling Weather Condition Information

Date	Time	Temperature (F)	Humidity (%)	To Wind Direction	Wind Speed (mph)	Sky Conditions	Samples Collected
4/10/2012	0800 hrs	43.3	54%	W	0.4	Clear/Sunny	Yes
	1200 hrs	65.3	50%	W	0		
	1500 hrs	53.1	52%	W	1		
4/11/2012	0800 hrs	41.5	55%	NW	1.1	Clear/Sunny	Yes
	1200 hrs	50.5	34%	W	1.6		
	1500 hrs	50	42%	W	1.8		
4/12/2012	0800 hrs	43.5	63%	NW	1.1	Clear/Sunny	Yes
	1200 hrs	55.8	40%	NW	1.9		
	1500 hrs	53.1	42%	NW	1.1		

Notes: hrs - hours; F - degrees Fahrenheit; wind direction (N - north, E - east, S - south, W - west);
mph - miles per hour, % - percent

Data for the above weather conditions were collected by United States Coast Guard onsite utilizing an on-site mobile weather station. The humidity measurements highlighted in bold are above 80% humidity. Air samples were not collected above this parameter. Samples collected on days during high humidity were collected once humidity dropped below 80%.

Table 10.
Air Analytical Summary
VOC Analysis - Mansfield Trail Dump
March 13 - 19, 2012

Sample ID		AA-001-031312-001				AA-001-031312-002				AA-002-031312-001			
Date		3/13/2012				3/13/2012				3/13/2012			
Sample Volume (liters)		4.01 Liter				4.03 Liter				4.00 Liter			
Matrix		Air				Air				Air			
Volatiles	ng/Tube	ng/Tube	ug/m	PFB(v/v)	ng/Tube	ug/m	PFB(v/v)	ng/Tube	ug/m	PFB(v/v)	ng/Tube	ug/m	PFB(v/v)
Dichlorodifluoromethane (CFC 12)	2.0	7.4	1.8	0.37	7.6	1.9	0.38	U	U	U	U	U	U
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Vinyl Chloride	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,3-Butadiene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Chloroethane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Acetone	10	U	U	U	U	U	U	U	U	U	U	U	U
Trichlorofluoromethane	2.0	3.2	0.80	0.14	3.3	0.82	0.15	U	U	U	U	U	U
1,1-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Methylene Chloride	5.0	U	U	U	U	U	U	U	U	U	U	U	U
Trichlorotrifluoroethane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	5.0	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ
2-Butanone (MEK)	2.0	U	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	2.0	2.1	0.53	0.13	U	U	U	U	U	U	U	U	U
n-Hexane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Chloroform	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Benzene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Bromodichloromethane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Trichloroethene	2.0	3.2	0.81	0.15	U	U	U	U	U	U	U	U	U
1,4-Dioxane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
2,2,4-Trimethylpentane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
n-Heptane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Toluene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
2-Hexanone	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Dibromochloromethane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dibromoethane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
n-Octane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Tetrachloroethene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
m,p-Xylenes	4.0	U	U	U	U	U	U	U	U	U	U	U	U
Bromoform	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Styrene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
o-Xylene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
n-Nonane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Cumene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
n-Propylbenzene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
3-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
4-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
2-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
n-Decane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,3-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,2,3-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,2,4-Trichlorobenzene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Naphthalene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Hexachlorobutadiene	2.0	U	U	U	U	U	U	U	U	U	U	U	U

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).
ng/L to ug/m3: ng/tube/sample volume in liter=ng/L=ug/m3.
ug/m3 to ppbv: conc. in ug/m3 X 24.46/particular compounds molecular weight.
 U - Not Detected
 J - estimated value
 Dilution Factor: 1

Table 10.
Air Analytical Summary
VOC Analysis - Mansfield Trail Dump
March 13 - 19, 2012

Sample ID:		AA-002-031312-002				AA-003-031312-001				FB-031312-001		
Date:		3/13/2012				3/13/2012				3/13/2012		
Sample Volume (liters):		3.99 Liter				4.1 Liter				NA		
Matrix:		Air				Air				Air		
Volatiles:	ng/Tube	ng/Tube	ng/m ³	PFB(v/v)	ng/Tube	ng/m ³	PFB(v/v)	ng/Tube	ng/m ³	PFB(v/v)		
Dichlorodifluoromethane (CFC 12)	2.0	2.0	0.51	0.10	2.7	0.67	0.14	U	U	U		
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	U	U	U		
Vinyl Chloride	2.0	U	U	U	U	U	U	U	U	U		
1,3-Butadiene	2.0	U	U	U	U	U	U	U	U	U		
Chloroethane	2.0	U	U	U	U	U	U	U	U	U		
Acetone	10	U	U	U	U	U	U	U	U	U		
Trichlorofluoromethane	2.0	U	U	U	U	U	U	U	U	U		
1,1-Dichloroethene	2.0	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ		
Methylene Chloride	5.0	U	U	U	U	U	U	U	U	U		
Trichlorotrifluoroethane	2.0	U	U	U	U	U	U	U	U	U		
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U		
1,1-Dichloroethane	5.0	U	U	U	U	U	U	U	U	U		
2-Butanone (MEK)	2.0	U	U	U	U	U	U	U	U	U		
cis-1,2-Dichloroethene	2.0	U	U	U	2.6	0.64	0.16	U	U	U		
n-Hexane	2.0	U	U	U	U	U	U	U	U	U		
Chloroform	2.0	U	U	U	U	U	U	U	U	U		
1,2-Dichloroethane	2.0	U	U	U	U	U	U	U	U	U		
1,1,1-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U		
Benzene	2.0	U	U	U	U	U	U	U	U	U		
Carbon Tetrachloride	2.0	U	U	U	U	U	U	U	U	U		
1,2-Dichloropropane	2.0	U	U	U	U	U	U	U	U	U		
Bromodichloromethane	2.0	U	U	U	U	U	U	U	U	U		
Trichloroethene	2.0	U	U	U	2.3	0.56	0.10	U	U	U		
1,4-Dioxane	2.0	U	U	U	U	U	U	U	U	U		
2,2,4-Trimethylpentane	2.0	U	U	U	U	U	U	U	U	U		
n-Heptane	2.0	U	U	U	U	U	U	U	U	U		
4-Methyl-2-pentanone	2.0	U	U	U	U	U	U	U	U	U		
1,1,2-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U		
Toluene	2.0	U	U	U	U	U	U	U	U	U		
2-Hexanone	2.0	U	U	U	U	U	U	U	U	U		
Dibromochloromethane	2.0	U	U	U	U	U	U	U	U	U		
1,2-Dibromoethane	2.0	U	U	U	U	U	U	U	U	U		
n-Octane	2.0	U	U	U	U	U	U	U	U	U		
Tetrachloroethene	2.0	U	U	U	U	U	U	U	U	U		
Chlorobenzene	2.0	U	U	U	U	U	U	U	U	U		
Ethylbenzene	2.0	U	U	U	U	U	U	U	U	U		
m,p-Xylenes	4.0	U	U	U	U	U	U	U	U	U		
Bromoform	2.0	U	U	U	U	U	U	U	U	U		
Styrene	2.0	U	U	U	U	U	U	U	U	U		
o-Xylene	2.0	U	U	U	U	U	U	U	U	U		
n-Nonane	2.0	U	U	U	U	U	U	U	U	U		
1,1,2,2-Tetrachloroethane	2.0	U	U	U	U	U	U	U	U	U		
Cumene	2.0	U	U	U	U	U	U	U	U	U		
n-Propylbenzene	2.0	U	U	U	U	U	U	U	U	U		
3-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U		
4-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U		
1,3,5-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U		
2-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U		
1,2,4-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U		
n-Decane	2.0	U	U	U	U	U	U	U	U	U		
1,3-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U		
1,4-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U		
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	U	U	U	U	U	U		
1,2,3-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U		
1,2-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U		
1,2,4-Trichlorobenzene	2.0	U	U	U	U	U	U	U	U	U		
Naphthalene	2.0	U	U	U	U	U	U	U	U	U		
Hexachlorobutadiene	2.0	U	U	U	U	U	U	U	U	U		

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m3: ng/tube/sample volume in liter=ng/L=ug/m3.

ug/m3 to ppbv: conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Dilution Factor: 1

Table 10.
Air Analytical Summary
VOC Analysis - Mansfield Trail Dump
March 13 - 19, 2012

Sample ID:		AA-000-031412-001				AA-001-031412-001				AA-002-031412-001			
Date:		3/14/2012				3/14/2012				3/14/2012			
Sample Volume (liters)		4.0 Liter				4.01 Liter				4.0 Liter			
Matrix:		Air				Air				Air			
Volatiles	ng/Tube	ng/Tube	ng/m ³	PPB(v/v)	ng/Tube	ng/m ³	PPB(v/v)	ng/Tube	ng/m ³	PPB(v/v)	ng/Tube	ng/m ³	PPB(v/v)
Dichlorodifluoromethane (CFC 12)	2.0	6.0	1.5	0.30	U	U	U	U	U	U	U	U	U
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Vinyl Chloride	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,3-Butadiene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Chloroethane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Acetone	10	U	U	U	12	3.1	1.3	U	U	U	U	U	U
Trichlorofluoromethane	2.0	2.6	0.64	0.11	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Methylene Chloride	5.0	U	U	U	U	U	U	U	U	U	U	U	U
Trichlorotrifluoroethane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	5.0	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ
2-Butanone (MEK)	2.0	U	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
n-Hexane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Chloroform	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Benzene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Bromodichloromethane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Trichloroethene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,4-Dioxane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
2,2,4-Trimethylpentane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
n-Heptane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Toluene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
2-Hexanone	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Dibromochloromethane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dibromoethane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
n-Octane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Tetrachloroethene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
m,p-Xylenes	4.0	U	U	U	U	U	U	U	U	U	U	U	U
Bromoform	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Styrene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
o-Xylene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
n-Nonane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Cumene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
n-Propylbenzene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
3-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
4-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
2-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
n-Decane	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,3-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,2,3-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
1,2,4-Trichlorobenzene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Naphthalene	2.0	U	U	U	U	U	U	U	U	U	U	U	U
Hexachlorobutadiene	2.0	U	U	U	U	U	U	U	U	U	U	U	U

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m³: ng/tube/sample volume in liter=ng/L=ug/m³.

ug/m³ to ppbv: conc. in ug/m³ X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Dilution Factor: 1

Table 10.
Air Analytical Summary
VOC Analysis - Mansfield Trail Dump
March 13 - 19, 2012

Sample ID		AA-004-031412-001			AA-005-031412-001			AA-006-031512-001		
Date		3/14/2012			3/14/2012			3/15/2012		
Sample Volume (liters)		4.0 Liter			4.0 Liter			4.0 Liter		
Matrix		Air			Air			Air		
Volatiles	ng/Tube	ng/Tube	ug/m ³	PPE(v/v)	ng/Tube	ug/m ³	PPE(v/v)	ng/Tube	ug/m ³	PPE(v/v)
Dichlorodifluoromethane (CFC 12)	2.0	2.50	0.64	0.13	6.1	1.5	0.31	U	U	U
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	U	U	U
Vinyl Chloride	2.0	U	U	U	U	U	U	U	U	U
1,3-Butadiene	2.0	U	U	U	U	U	U	U	U	U
Chloroethane	2.0	U	U	U	U	U	U	U	U	U
Acetone	10	U	U	U	U	U	U	U	U	U
Trichlorofluoromethane	2.0	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
Methylene Chloride	5.0	U	U	U	U	U	U	U	U	U
Trichlorotrifluoroethane	2.0	U	U	U	2.4	0.61	0.11	U	U	U
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	5.0	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ
2-Butanone (MEK)	2.0	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
n-Hexane	2.0	U	U	U	U	U	U	U	U	U
Chloroform	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	2.0	U	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U
Benzene	2.0	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	2.0	U	U	U	U	U	U	U	U	U
Bromodichloromethane	2.0	U	U	U	U	U	U	U	U	U
Trichloroethene	2.0	U	U	U	U	U	U	U	U	U
1,4-Dioxane	2.0	U	U	U	U	U	U	U	U	U
2,2,4-Trimethylpentane	2.0	U	U	U	U	U	U	U	U	U
n-Heptane	2.0	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	2.0	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U
Toluene	2.0	U	U	U	U	U	U	U	U	U
2-Hexanone	2.0	U	U	U	U	U	U	U	U	U
Dibromochloromethane	2.0	U	U	U	U	U	U	U	U	U
1,2-Dibromoethane	2.0	U	U	U	U	U	U	U	U	U
n-Octane	2.0	U	U	U	U	U	U	U	U	U
Tetrachloroethene	2.0	U	U	U	U	U	U	U	U	U
Chlorobenzene	2.0	U	U	U	U	U	U	U	U	U
Ethylbenzene	2.0	U	U	U	U	U	U	U	U	U
m,p-Xylenes	4.0	U	U	U	U	U	U	U	U	U
Bromoform	2.0	U	U	U	U	U	U	U	U	U
Styrene	2.0	U	U	U	U	U	U	U	U	U
o-Xylene	2.0	U	U	U	U	U	U	U	U	U
n-Nonane	2.0	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	2.0	U	U	U	U	U	U	U	U	U
Cumene	2.0	U	U	U	U	U	U	U	U	U
n-Propylbenzene	2.0	U	U	U	U	U	U	U	U	U
3-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
4-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
2-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
n-Decane	2.0	U	U	U	U	U	U	U	U	U
1,3-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	U	U	U	U	U	U
1,2,3-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
1,2,4-Trichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
Naphthalene	2.0	U	U	U	U	U	U	U	U	U
Hexachlorobutadiene	2.0	U	U	U	U	U	U	U	U	U

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m³: ng/tube/sample volume in liter=ng/L=ug/m³.

ug/m³ to ppbv: conc. in ug/m³ X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Dilution Factor: 1

Table 10.
Air Analytical Summary
VOC Analysis - Mansfield Trail Dump
March 13 - 19, 2012

Sample ID:		AA-007-031512-001			AA-008-031512-001			FB-031512-001		
Date:		3/15/2012			3/15/2012			3/15/2012		
Sample Volume (liters):		4.01 Liter			4.01 Liter			NA		
Matrix:		Air			Air			Air		
Volatiles:	ng/Tube	ng/Tube	ug/m	PPB(v/v)	ng/Tube	ug/m	PPB(v/v)	ng/Tube	ug/m	PPB(v/v)
Dichlorodifluoromethane (CFC 12)	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	U	U	U
Vinyl Chloride	2.0	U	U	U	U	U	U	U	U	U
1,3-Butadiene	2.0	U	U	U	U	U	U	U	U	U
Chloroethane	2.0	U	U	U	U	U	U	U	U	U
Acetone	10	U	U	U	U	U	U	U	U	U
Trichlorofluoromethane	2.0	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
Methylene Chloride	5.0	U	U	U	U	U	U	U	U	U
Trichlorotrifluoroethane	2.0	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	5.0	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ
2-Butanone (MEK)	2.0	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
n-Hexane	2.0	U	U	U	U	U	U	U	U	U
Chloroform	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	2.0	U	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U
Benzene	2.0	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	2.0	U	U	U	U	U	U	U	U	U
Bromodichloromethane	2.0	U	U	U	U	U	U	U	U	U
Trichloroethene	2.0	U	U	U	U	U	U	U	U	U
1,4-Dioxane	2.0	U	U	U	U	U	U	U	U	U
2,2,4-Trimethylpentane	2.0	U	U	U	U	U	U	U	U	U
n-Heptane	2.0	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	2.0	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U
Toluene	2.0	U	U	U	U	U	U	U	U	U
2-Hexanone	2.0	U	U	U	U	U	U	U	U	U
Dibromochloromethane	2.0	U	U	U	U	U	U	U	U	U
1,2-Dibromoethane	2.0	U	U	U	U	U	U	U	U	U
n-Octane	2.0	U	U	U	U	U	U	U	U	U
Tetrachloroethene	2.0	U	U	U	U	U	U	U	U	U
Chlorobenzene	2.0	U	U	U	U	U	U	U	U	U
Ethylbenzene	2.0	U	U	U	U	U	U	U	U	U
m,p-Xylenes	4.0	U	U	U	U	U	U	U	U	U
Bromoform	2.0	U	U	U	U	U	U	U	U	U
Styrene	2.0	U	U	U	U	U	U	U	U	U
o-Xylene	2.0	U	U	U	U	U	U	U	U	U
n-Nonane	2.0	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	2.0	U	U	U	U	U	U	U	U	U
Cumene	2.0	U	U	U	U	U	U	U	U	U
n-Propylbenzene	2.0	U	U	U	U	U	U	U	U	U
3-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
4-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
2-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
n-Decane	2.0	U	U	U	U	U	U	U	U	U
1,3-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	U	U	U	U	U	U
1,2,3-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
1,2,4-Trichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
Naphthalene	2.0	U	U	U	U	U	U	U	U	U
Hexachlorobutadiene	2.0	U	U	U	U	U	U	U	U	U

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m3: ng/tube/sample volume in liter=ng/L=ug/m3.

ug/m3 to ppbv: conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Dilution Factor: 1

Table 10.
Air Analytical Summary
VOC Analysis - Mansfield Trail Dump
March 13 - 19, 2012

Sample ID:	AA-009-031912-001				AA-010-031912-001				AA-011-031912-001			
Date:	3/19/2012				3/19/2012				3/19/2012			
Sample Volume (liters)	4.0 Liter				4.42 Liter				3.71 Liter			
Matrix:	Air				Air				Air			
Volatiles	ng/Tube	ng/Tube	ng/m	PPB(v/v)	ng/Tube	ng/m	PPB(v/v)	ng/Tube	ng/m	PPB(v/v)		
Dichlorodifluoromethane (CFC 12)	2.0	U	U	U	4.9	1.1	0.22	U	U	U		
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	U	U	U		
Vinyl Chloride	2.0	U	U	U	U	U	U	U	U	U		
1,3-Butadiene	2.0	U	U	U	U	U	U	U	U	U		
Chloroethane	2.0	U	U	U	U	U	U	U	U	U		
Acetone	10	U	U	U	U	U	U	U	U	U		
Trichlorofluoromethane	2.0	U	U	U	U	U	U	U	U	U		
1,1-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U		
Methylene Chloride	5.0	U	U	U	U	U	U	U	U	U		
Trichlorotrifluoroethane	2.0	U	U	U	U	U	U	U	U	U		
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U		
1,1-Dichloroethane	5.0	U	U	U	U	U	U	U	U	U		
2-Butanone (MEK)	2.0	U	U	U	U	U	U	U	U	U		
cis-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U		
n-Hexane	2.0	U	U	U	U	U	U	U	U	U		
Chloroform	2.0	U	U	U	U	U	U	U	U	U		
1,2-Dichloroethane	2.0	U	U	U	U	U	U	U	U	U		
1,1,1-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U		
Benzene	2.0	U	U	U	U	U	U	U	U	U		
Carbon Tetrachloride	2.0	U	U	U	U	U	U	U	U	U		
1,2-Dichloropropane	2.0	U	U	U	U	U	U	U	U	U		
Bromodichloromethane	2.0	U	U	U	U	U	U	U	U	U		
Trichloroethene	2.0	U	U	U	U	U	U	U	U	U		
1,4-Dioxane	2.0	U	U	U	U	U	U	U	U	U		
2,2,4-Trimethylpentane	2.0	U	U	U	U	U	U	U	U	U		
n-Heptane	2.0	U	U	U	U	U	U	U	U	U		
4-Methyl-2-pentanone	2.0	U	U	U	U	U	U	U	U	U		
1,1,2-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U		
Toluene	2.0	U	U	U	U	U	U	U	U	U		
2-Hexanone	2.0	U	U	U	U	U	U	U	U	U		
Dibromochloromethane	2.0	U	U	U	U	U	U	U	U	U		
1,2-Dibromoethane	2.0	U	U	U	U	U	U	U	U	U		
n-Octane	2.0	U	U	U	U	U	U	U	U	U		
Tetrachloroethene	2.0	U	U	U	U	U	U	U	U	U		
Chlorobenzene	2.0	U	U	U	U	U	U	U	U	U		
Ethylbenzene	2.0	U	U	U	U	U	U	U	U	U		
m,p-Xylenes	4.0	U	U	U	U	U	U	U	U	U		
Bromoform	2.0	U	U	U	U	U	U	U	U	U		
Styrene	2.0	U	U	U	U	U	U	U	U	U		
o-Xylene	2.0	U	U	U	U	U	U	U	U	U		
n-Nonane	2.0	U	U	U	U	U	U	U	U	U		
1,1,2,2-Tetrachloroethane	2.0	U	U	U	U	U	U	U	U	U		
Cumene	2.0	U	U	U	U	U	U	U	U	U		
n-Propylbenzene	2.0	U	U	U	U	U	U	U	U	U		
3-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U		
4-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U		
1,3,5-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U		
2-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U		
1,2,4-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U		
n-Decane	2.0	U	U	U	U	U	U	U	U	U		
1,3-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U		
1,4-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U		
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	U	U	U	U	U	U		
1,2,3-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U		
1,2-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U		
1,2,4-Trichlorobenzene	2.0	U	U	U	U	U	U	U	U	U		
Naphthalene	2.0	U	U	U	U	U	U	U	U	U		
Hexachlorobutadiene	2.0	U	U	U	U	U	U	U	U	U		

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m3: ng/tube/sample volume in liter=ng/L=ug/m3.

ug/m3 to ppbv: conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Dilution Factor: 1

Table 10.
Air Analytical Summary
VOC Analysis - Mansfield Trail Dump
March 13 - 19, 2012

Sample ID:	FB-031912-001			
Date:	3/19/2012			
Sample Volume (liters)	NA			
Matrix:	Air			
Volatiles	ng/Tube	ng/Tube	ug/m ³	PPB(v/v)
Dichlorodifluoromethane (CFC 12)	2.0	U	U	U
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.0	U	U	U
Vinyl Chloride	2.0	U	U	U
1,3-Butadiene	2.0	U	U	U
Chloroethane	2.0	U	U	U
Acetone	10	U	U	U
Trichlorofluoromethane	2.0	U	U	U
1,1-Dichloroethene	2.0	U	U	U
Methylene Chloride	5.0	U	U	U
Trichlorotrifluoroethane	2.0	U	U	U
trans-1,2-Dichloroethene	2.0	U	U	U
1,1-Dichloroethane	5.0	UJ	UJ	UJ
2-Butanone (MEK)	2.0	U	U	U
cis-1,2-Dichloroethene	2.0	U	U	U
n-Hexane	2.0	U	U	U
Chloroform	2.0	U	U	U
1,2-Dichloroethane	2.0	U	U	U
1,1,1-Trichloroethane	2.0	U	U	U
Benzene	2.0	U	U	U
Carbon Tetrachloride	2.0	U	U	U
1,2-Dichloropropane	2.0	U	U	U
Bromodichloromethane	2.0	U	U	U
Trichloroethene	2.0	U	U	U
1,4-Dioxane	2.0	U	U	U
2,2,4-Trimethylpentane	2.0	U	U	U
n-Heptane	2.0	U	U	U
4-Methyl-2-pentanone	2.0	U	U	U
1,1,2-Trichloroethane	2.0	U	U	U
Toluene	2.0	U	U	U
2-Hexanone	2.0	U	U	U
Dibromochloromethane	2.0	U	U	U
1,2-Dibromoethane	2.0	U	U	U
n-Octane	2.0	U	U	U
Tetrachloroethene	2.0	U	U	U
Chlorobenzene	2.0	U	U	U
Ethylbenzene	2.0	U	U	U
m,p-Xylenes	4.0	U	U	U
Bromoform	2.0	U	U	U
Styrene	2.0	U	U	U
o-Xylene	2.0	U	U	U
n-Nonane	2.0	U	U	U
1,1,2,2-Tetrachloroethane	2.0	U	U	U
Cumene	2.0	U	U	U
n-Propylbenzene	2.0	U	U	U
3-Ethyltoluene	2.0	U	U	U
4-Ethyltoluene	2.0	U	U	U
1,3,5-Trimethylbenzene	2.0	U	U	U
2-Ethyltoluene	2.0	U	U	U
1,2,4-Trimethylbenzene	2.0	U	U	U
n-Decane	2.0	U	U	U
1,3-Dichlorobenzene	2.0	U	U	U
1,4-Dichlorobenzene	2.0	U	U	U
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U
1,2,3-Trimethylbenzene	2.0	U	U	U
1,2-Dichlorobenzene	2.0	U	U	U
1,2,4-Trichlorobenzene	2.0	U	U	U
Naphthalene	2.0	U	U	U
Hexachlorobutadiene	2.0	U	U	U

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m³: ng/tube/sample volume in liter=ng/L=ug/m³.

ug/m³ to ppbv: conc. in ug/m³ X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Dilution Factor: 1

Table 11.
Air Analytical Summary
VOC Analysis - Mansfield Trail Dump
March 22 - 27, 2012

Sample ID:	AA-005-032612-001				AA-011-032612-001				AA-016-032612-001			
Date:	3/26/2012				3/26/2012				3/26/2012			
Sample Volume (liters)	4.29 Liter				4.13 Liter				4.04 Liter			
Matrix:	Air				Air				Air			
Variables	ng/Tube	ug/Tube	ug/m ³	PPE(v/v)	ng/Tube	ug/m ³	PPE(v/v)	ng/Tube	ug/m ³	PPE(v/v)	ng/Tube	PPE(v/v)
Dichlorodifluoromethane (CFC 12)	2.0	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	U	U	U	U	U
Vinyl Chloride	2.0	U	U	U	U	U	U	U	U	U	U	U
1,3-Butadiene	2.0	U	U	U	U	U	U	U	U	U	U	U
Chloroethane	2.0	U	U	U	U	U	U	U	U	U	U	U
Acetone	10	U	U	U	U	U	U	U	U	U	U	U
Trichlorofluoromethane	2.0	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U	U	U
Methylene Chloride	5.0	U	U	U	U	U	U	U	U	U	U	U
Trichlorotrifluoroethane	2.0	U	U	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	5.0	U	U	U	U	U	U	U	U	U	U	U
2-Butanone (MEK)	2.0	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U	U	U
n-Hexane	2.0	U	U	U	U	U	U	U	U	U	U	U
Chloroform	2.0	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	2.0	U	U	U	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U	U	U
Benzene	2.0	U	U	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	2.0	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	2.0	U	U	U	U	U	U	U	U	U	U	U
Bromodichloromethane	2.0	U	U	U	U	U	U	U	U	U	U	U
Trichloroethene	2.0	U	U	U	U	U	U	U	U	U	U	U
1,4-Dioxane	2.0	U	U	U	U	U	U	U	U	U	U	U
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	U	U	U	U	U	U	U	U	U
n-Heptane	2.0	U	U	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	2.0	U	U	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U	U	U
Toluene	2.0	U	U	U	U	U	U	U	U	U	U	U
2-Hexanone	2.0	U	U	U	U	U	U	U	U	U	U	U
Dibromochloromethane	2.0	U	U	U	U	U	U	U	U	U	U	U
1,2-Dibromoethane	2.0	U	U	U	U	U	U	U	U	U	U	U
n-Octane	2.0	U	U	U	U	U	U	U	U	U	U	U
Tetrachloroethene	2.0	U	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	2.0	U	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	2.0	U	U	U	U	U	U	U	U	U	U	U
m,p-Xylenes	4.0	U	U	U	U	U	U	U	U	U	U	U
Bromoform	2.0	U	U	U	U	U	U	U	U	U	U	U
Styrene	2.0	U	U	U	U	U	U	U	U	U	U	U
o-Xylene	2.0	U	U	U	U	U	U	U	U	U	U	U
n-Nonane	2.0	U	U	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	2.0	U	U	U	U	U	U	U	U	U	U	U
Cumene	2.0	U	U	U	U	U	U	U	U	U	U	U
n-Propylbenzene	2.0	U	U	U	U	U	U	U	U	U	U	U
3-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U	U	U
4-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U	U	U
2-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U	U	U
n-Decane	2.0	U	U	U	U	U	U	U	U	U	U	U
1,3-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U	U	U
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	U	U	U	U	U	U	U	U
1,2,3-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	2.0	U	U	U	2.6	0.64	0.11	U	U	U	U	U
1,2,4-Trichlorobenzene	2.0	U	U	U	U	U	U	U	U	U	U	U
Naphthalene	2.0	U	U	U	U	U	U	U	U	U	U	U
Hexachlorobutadiene	2.0	U	U	U	U	U	U	U	U	U	U	U

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m³: ng/tube/sample volume in liter=ng/L=ug/m³.

ug/m³ to ppbv: conc. in ug/m³ X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Table 11.
Air Analytical Summary
VOC Analysis - Mansfield Trail Dump
March 22 - 27, 2012

Sample ID:		AA-017-032612-001				FB-032612-001			AA-006-032712-001		
Date:		3/26/2012				3/26/2012			3/27/2012		
Sample Volume (liters):		3.98 Liter				NA			4.38 Liter		
Matrix:		Air				Air			Air		
Volatiles	ng/Tube	ng/Tube	ng/m ³	PPB(v/v)	ng/Tube	ng/m ³	PPB(v/v)	ng/Tube	ng/m ³	PPB(v/v)	
Dichlorodifluoromethane (CFC 12)	2.0	U	U	U	U	U	U	U	U	U	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	U	U	U	
Vinyl Chloride	2.0	U	U	U	U	U	U	U	U	U	
1,3-Butadiene	2.0	U	U	U	U	U	U	U	U	U	
Chloroethane	2.0	U	U	U	U	U	U	U	U	U	
Acetone	10	U	U	U	U	U	U	U	U	U	
Trichlorofluoromethane	2.0	U	U	U	U	U	U	U	U	U	
1,1-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U	
Methylene Chloride	5.0	U	U	U	U	U	U	U	U	U	
Trichlorotrifluoroethane	2.0	U	U	U	U	U	U	U	U	U	
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U	
1,1-Dichloroethane	5.0	U	U	U	U	U	U	U	U	U	
2-Butanone (MEK)	2.0	U	U	U	U	U	U	U	U	U	
cis-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U	
n-Hexane	2.0	U	U	U	U	U	U	U	U	U	
Chloroform	2.0	U	U	U	U	U	U	U	U	U	
1,2-Dichloroethane	2.0	U	U	U	U	U	U	U	U	U	
1,1,1-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U	
Benzene	2.0	U	U	U	U	U	U	U	U	U	
Carbon Tetrachloride	2.0	U	U	U	U	U	U	U	U	U	
1,2-Dichloropropane	2.0	U	U	U	U	U	U	U	U	U	
Bromodichloromethane	2.0	U	U	U	U	U	U	U	U	U	
Trichloroethene	2.0	U	U	U	U	U	U	U	U	U	
1,4-Dioxane	2.0	U	U	U	U	U	U	U	U	U	
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	U	U	U	U	U	U	U	
n-Heptane	2.0	U	U	U	U	U	U	U	U	U	
4-Methyl-2-pentanone	2.0	U	U	U	U	U	U	U	U	U	
1,1,2-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U	
Toluene	2.0	U	U	U	U	U	U	U	U	U	
2-Hexanone	2.0	U	U	U	U	U	U	U	U	U	
Dibromochloromethane	2.0	U	U	U	U	U	U	U	U	U	
1,2-Dibromoethane	2.0	U	U	U	U	U	U	U	U	U	
n-Octane	2.0	U	U	U	U	U	U	U	U	U	
Tetrachloroethene	2.0	U	U	U	U	U	U	U	U	U	
Chlorobenzene	2.0	U	U	U	U	U	U	U	U	U	
Ethylbenzene	2.0	U	U	U	U	U	U	U	U	U	
m,p-Xylenes	4.0	U	U	U	U	U	U	U	U	U	
Bromoform	2.0	U	U	U	U	U	U	U	U	U	
Styrene	2.0	U	U	U	U	U	U	U	U	U	
o-Xylene	2.0	U	U	U	U	U	U	U	U	U	
n-Nonane	2.0	U	U	U	U	U	U	U	U	U	
1,1,2,2-Tetrachloroethane	2.0	U	U	U	U	U	U	U	U	U	
Cumene	2.0	U	U	U	U	U	U	U	U	U	
n-Propylbenzene	2.0	U	U	U	U	U	U	U	U	U	
3-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U	
4-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U	
1,3,5-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U	
2-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U	
1,2,4-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U	
n-Decane	2.0	U	U	U	U	U	U	U	U	U	
1,3-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U	
1,4-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U	
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	U	U	U	U	U	U	
1,2,3-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U	
1,2-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U	
1,2,4-Trichlorobenzene	2.0	U	U	U	U	U	U	U	U	U	
Naphthalene	2.0	U	U	U	U	U	U	U	U	U	
Hexachlorobutadiene	2.0	U	U	U	U	U	U	U	U	U	

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m³: ng/tube/sample volume in liter=ng/L=ug/m³.

ug/m³ to ppbv: conc. in ug/m³ X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Table 11.
Air Analytical Summary
VOC Analysis - Mansfield Trail Dump
March 22 - 27, 2012

Sample ID:	AA-009-032712-001				AA-017-032712-001			AA-018-032712-001		
Date:	3/27/2012				3/27/2012			3/27/2012		
Sample Volume (liters):	4.35 Liter				4.52 Liter			3.96 Liter		
Matrix:	Air				Air			Air		
Volatiles	ng/Tube	ng/Tube	ug/m ³	PFB(v/v)	ng/Tube	ug/m ³	PFB(v/v)	ng/Tube	ug/m ³	PFB(v/v)
Dichlorodifluoromethane (CFC 12)	2.0	U	U	U	2.1	0.47	0.096	U	U	U
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	U	U	U
Vinyl Chloride	2.0	U	U	U	U	U	U	U	U	U
1,3-Butadiene	2.0	U	U	U	U	U	U	U	U	U
Chloroethane	2.0	U	U	U	U	U	U	U	U	U
Acetone	10	U	U	U	U	U	U	U	U	U
Trichlorofluoromethane	2.0	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
Methylene Chloride	5.0	U	U	U	U	U	U	U	U	U
Trichlorotrifluoroethane	2.0	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	5.0	U	U	U	U	U	U	U	U	U
2-Butanone (MEK)	2.0	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
n-Hexane	2.0	2.5	0.58	0.17	U	U	U	U	U	U
Chloroform	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	2.0	U	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U
Benzene	2.0	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	2.0	U	U	U	U	U	U	U	U	U
Bromodichloromethane	2.0	U	U	U	U	U	U	U	U	U
Trichloroethene	2.0	U	U	U	U	U	U	U	U	U
1,4-Dioxane	2.0	U	U	U	U	U	U	U	U	U
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	U	U	U	U	U	U	U
n-Heptane	2.0	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	2.0	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U
Toluene	2.0	5.6	1.3	0.34	U	U	U	U	U	U
2-Hexanone	2.0	U	U	U	U	U	U	U	U	U
Dibromochloromethane	2.0	U	U	U	U	U	U	U	U	U
1,2-Dibromoethane	2.0	U	U	U	U	U	U	U	U	U
n-Octane	2.0	2.3	0.53	0.11	U	U	U	U	U	U
Tetrachloroethene	2.0	U	U	U	U	U	U	U	U	U
Chlorobenzene	2.0	3.3	0.77	0.17	U	U	U	U	U	U
Ethylbenzene	2.0	U	U	U	U	U	U	U	U	U
m,p-Xylenes	4.0	U	U	U	U	U	U	U	U	U
Bromoform	2.0	U	U	U	U	U	U	U	U	U
Styrene	2.0	U	U	U	U	U	U	U	U	U
o-Xylene	2.0	U	U	U	U	U	U	U	U	U
n-Nonane	2.0	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	2.0	U	U	U	U	U	U	U	U	U
Cumene	2.0	U	U	U	U	U	U	U	U	U
n-Propylbenzene	2.0	U	U	U	U	U	U	U	U	U
3-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
4-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
2-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
n-Decane	2.0	6.0	1.4	0.24	U	U	U	U	U	U
1,3-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	U	U	U	U	U	U
1,2,3-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	2.0	4.6	1.0	0.17	2.6	0.58	0.096	U	U	U
1,2,4-Trichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
Naphthalene	2.0	U	U	U	U	U	U	U	U	U
Hexachlorobutadiene	2.0	U	U	U	U	U	U	U	U	U

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m³: ng/tube/sample volume in liter=ug/m³.

ug/m³ to ppbv: conc. in ug/m³ X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value.

Table 11.
Air Analytical Summary
VOC Analysis - Mansfield Trail Dump
March 22 - 27, 2012

Sample ID:	FB-032712-001				AA-006-032812-001			AA-010-032812-001		
Date:	3/27/2012				3/28/2012			3/28/2012		
Sample Volume (liters):	NA				3.81 Liter			4.11 Liter		
Matrix:	Air				Air			Air		
Volume:	ng/Tube	ng/Tube	ug/m ³	PPB(v/v)	ng/Tube	ug/m ³	PPB(v/v)	ng/Tube	ug/m ³	PPB(v/v)
Dichlorodifluoromethane (CFC 12)	2.0	U	U	U	2.1	0.47	0.096	U	U	U
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	U	U	U
Vinyl Chloride	2.0	U	U	U	U	U	U	U	U	U
1,3-Butadiene	2.0	U	U	U	U	U	U	U	U	U
Chloroethane	2.0	U	U	U	U	U	U	U	U	U
Acetone	10	U	U	U	U	U	U	U	U	U
Trichlorofluoromethane	2.0	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
Methylene Chloride	5.0	U	U	U	U	U	U	U	U	U
Trichlorotrifluoroethane	2.0	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	5.0	U	U	U	U	U	U	U	U	U
2-Butanone (MEK)	2.0	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
n-Hexane	2.0	U	U	U	U	U	U	U	U	U
Chloroform	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	2.0	U	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U
Benzene	2.0	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	2.0	U	U	U	U	U	U	U	U	U
Bromodichloromethane	2.0	U	U	U	U	U	U	U	U	U
Trichloroethene	2.0	U	U	U	U	U	U	U	U	U
1,4-Dioxane	2.0	U	U	U	U	U	U	U	U	U
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	U	U	U	U	U	U	U
n-Heptane	2.0	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	2.0	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U
Toluene	2.0	U	U	U	U	U	U	U	U	U
2-Hexanone	2.0	U	U	U	U	U	U	U	U	U
Dibromochloromethane	2.0	U	U	U	U	U	U	U	U	U
1,2-Dibromoethane	2.0	U	U	U	U	U	U	U	U	U
n-Octane	2.0	U	U	U	U	U	U	U	U	U
Tetrachloroethene	2.0	U	U	U	U	U	U	U	U	U
Chlorobenzene	2.0	U	U	U	U	U	U	U	U	U
Ethylbenzene	2.0	U	U	U	U	U	U	U	U	U
m,p-Xylenes	4.0	U	U	U	U	U	U	U	U	U
Bromoform	2.0	U	U	U	U	U	U	U	U	U
Styrene	2.0	U	U	U	U	U	U	U	U	U
o-Xylene	2.0	U	U	U	U	U	U	U	U	U
n-Nonane	2.0	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	2.0	U	U	U	U	U	U	U	U	U
Cumene	2.0	U	U	U	U	U	U	U	U	U
n-Propylbenzene	2.0	U	U	U	U	U	U	U	U	U
3-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
4-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
2-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
n-Decane	2.0	U	U	U	U	U	U	U	U	U
1,3-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	U	U	U	U	U	U
1,2,3-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	2.0	U	U	U	2.6	0.58	0.096	U	U	U
1,2,4-Trichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
Naphthalene	2.0	U	U	U	U	U	U	U	U	U
Hexachlorobutadiene	2.0	U	U	U	U	U	U	U	U	U

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m³: ng/tube/sample volume in liter=ng/L=ug/m³.

ug/m³ to ppbv: conc. in ug/m³ X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Table 11.
Air Analytical Summary
VOC Analysis - Mansfield Trail Dump
March 22 - 27, 2012

Sample ID:	AA-016-032812-001				FB-032812-001			
Date:	3/28/2012				3/28/2012			
Sample Volume (liters):	4.3 Liter				NA			
Matrix:	Air				Air			
Volatiles:	ng/Tube	ng/Tube	ng/m ³	PFB(ug)	ng/Tube	ng/m ³	PFB(ug)	
Dichlorodifluoromethane (CFC 12)	2.0	U	U	U	U	U	U	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	
Vinyl Chloride	2.0	U	U	U	U	U	U	
1,3-Butadiene	2.0	U	U	U	U	U	U	
Chloroethane	2.0	U	U	U	U	U	U	
Acetone	10	U	U	U	U	U	U	
Trichlorofluoromethane	2.0	U	U	U	U	U	U	
1,1-Dichloroethene	2.0	U	U	U	U	U	U	
Methylene Chloride	5.0	U	U	U	U	U	U	
Trichlorotrifluoroethane	2.0	U	U	U	U	U	U	
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U	
1,1-Dichloroethane	5.0	UJ	UJ	UJ	UJ	UJ	UJ	
2-Butanone (MEK)	2.0	U	U	U	U	U	U	
cis-1,2-Dichloroethene	2.0	U	U	U	U	U	U	
n-Hexane	2.0	U	U	U	U	U	U	
Chloroform	2.0	U	U	U	U	U	U	
1,2-Dichloroethane	2.0	U	U	U	U	U	U	
1,1,1-Trichloroethane	2.0	U	U	U	U	U	U	
Benzene	2.0	U	U	U	U	U	U	
Carbon Tetrachloride	2.0	U	U	U	U	U	U	
1,2-Dichloropropane	2.0	U	U	U	U	U	U	
Bromodichloromethane	2.0	U	U	U	U	U	U	
Trichloroethene	2.0	U	U	U	U	U	U	
1,4-Dioxane	2.0	U	U	U	U	U	U	
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	U	U	U	U	
n-Heptane	2.0	U	U	U	U	U	U	
4-Methyl-2-pentanone	2.0	U	U	U	U	U	U	
1,1,2-Trichloroethane	2.0	U	U	U	U	U	U	
Toluene	2.0	U	U	U	U	U	U	
2-Hexanone	2.0	U	U	U	U	U	U	
Dibromochloromethane	2.0	U	U	U	U	U	U	
1,2-Dibromoethane	2.0	U	U	U	U	U	U	
n-Octane	2.0	U	U	U	U	U	U	
Tetrachloroethene	2.0	U	U	U	U	U	U	
Chlorobenzene	2.0	U	U	U	U	U	U	
Ethylbenzene	2.0	U	U	U	U	U	U	
m,p-Xylenes	4.0	U	U	U	U	U	U	
Bromoform	2.0	U	U	U	U	U	U	
Styrene	2.0	U	U	U	U	U	U	
o-Xylene	2.0	U	U	U	U	U	U	
n-Nonane	2.0	U	U	U	U	U	U	
1,1,2,2-Tetrachloroethane	2.0	U	U	U	U	U	U	
Cumene	2.0	U	U	U	U	U	U	
n-Propylbenzene	2.0	U	U	U	U	U	U	
3-Ethyltoluene	2.0	U	U	U	U	U	U	
4-Ethyltoluene	2.0	U	U	U	U	U	U	
1,3,5-Trimethylbenzene	2.0	U	U	U	U	U	U	
2-Ethyltoluene	2.0	U	U	U	U	U	U	
1,2,4-Trimethylbenzene	2.0	U	U	U	U	U	U	
n-Decane	2.0	U	U	U	U	U	U	
1,3-Dichlorobenzene	2.0	U	U	U	U	U	U	
1,4-Dichlorobenzene	2.0	U	U	U	U	U	U	
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	U	U	U	
1,2,3-Trimethylbenzene	2.0	U	U	U	U	U	U	
1,2-Dichlorobenzene	2.0	U	U	U	U	U	U	
1,2,4-Trichlorobenzene	2.0	U	U	U	U	U	U	
Naphthalene	2.0	U	U	U	U	U	U	
Hexachlorobutadiene	2.0	U	U	U	U	U	U	

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m³: ng/tube/sample volume in liter=ng/L=ug/m³.

ug/m³ to ppbv: conc. in ug/m³ X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Table 12.
Air Analytical Summary
VOC Analytical - Mansfield Trail Dump
March 29 - April 12, 2012

Sample ID:		AA-009-032912-001			AA-010-032912-001			AA-017-032912-001		
Date:		3/29/2012			3/29/2012			3/29/2012		
Sample Volume (liters):		4.07 Liter			3.59 Liter			3.96 Liter		
Matrix:		Air			Air			Air		
Volatiles:	ng/Tube	ng/Tube	ug/m	PPB(v/v)	ng/Tube	ug/m	PPB(v/v)	ng/Tube	ug/m	PPB(v/v)
Dichlorodifluoromethane (CFC 12)	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	U	U	U
Vinyl Chloride	2.0	U	U	U	U	U	U	U	U	U
1,3-Butadiene	2.0	U	U	U	U	U	U	U	U	U
Chloroethane	2.0	U	U	U	U	U	U	U	U	U
Acetone	10	U	U	U	16	4.5	1.9	U	U	U
Trichlorofluoromethane	2.0	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
Methylene Chloride	5.0	U	U	U	U	U	U	U	U	U
Trichlorotrifluoroethane	2.0	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	5.0	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ
2-Butanone (MEK)	2.0	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
n-Hexane	2.0	U	U	U	U	U	U	U	U	U
Chloroform	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	2.0	U	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U
Benzene	2.0	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	2.0	U	U	U	U	U	U	U	U	U
Bromodichloromethane	2.0	U	U	U	U	U	U	U	U	U
Trichloroethene	2.0	U	U	U	U	U	U	U	U	U
1,4-Dioxane	2.0	U	U	U	U	U	U	U	U	U
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	U	U	U	U	U	U	U
n-Heptane	2.0	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	2.0	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U
Toluene	2.0	U	U	U	2.0	0.56	0.15	U	U	U
2-Hexanone	2.0	U	U	U	U	U	U	U	U	U
Dibromochloromethane	2.0	U	U	U	U	U	U	U	U	U
1,2-Dibromoethane	2.0	U	U	U	U	U	U	U	U	U
n-Octane	2.0	U	U	U	U	U	U	U	U	U
Tetrachloroethene	2.0	U	U	U	U	U	U	U	U	U
Chlorobenzene	2.0	U	U	U	U	U	U	U	U	U
Ethylbenzene	2.0	U	U	U	U	U	U	U	U	U
m,p-Xylenes	4.0	U	U	U	U	U	U	U	U	U
Bromoform	2.0	U	U	U	U	U	U	U	U	U
Styrene	2.0	U	U	U	U	U	U	U	U	U
o-Xylene	2.0	U	U	U	U	U	U	U	U	U
n-Nonane	2.0	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	2.0	U	U	U	U	U	U	U	U	U
Cumene	2.0	U	U	U	U	U	U	U	U	U
n-Propylbenzene	2.0	U	U	U	U	U	U	U	U	U
3-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
4-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
2-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
n-Decane	2.0	U	U	U	5.3	1.5	0.25	U	U	U
1,3-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	U	U	U	U	U	U
1,2,3-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
1,2,4-Trichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
Naphthalene	2.0	U	U	U	U	U	U	U	U	U
Hexachlorobutadiene	2.0	U	U	U	U	U	U	U	U	U

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m3: ng/tube/sample volume in liter=ng/L=ug/m3.

ug/m3 to ppby: conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Table 12.
Air Analytical Summary
VOC Analytical - Mansfield Trail Dump
March 29 - April 12, 2012

Sample ID	AA-018-032912-001				FB-032912-001			AA-000-033012-001		
Date	3/29/2012				3/29/2012			3/30/2012		
Sample Volume (liters)	3.52 Liter				NA			3.9 Liter		
Matrix	Air				Air			Air		
Conc. Units	ng/Tube	ng/Tube	ug/m ³	PPE (ug)	ng/Tube	ng/m ³	PPE (ug)	ng/Tube	ug/m ³	PPE (ug)
Dichlorodifluoromethane (CFC 12)	2.0	3.0	0.84	0.17	U	U	U	2.2	0.57	0.11
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	U	U	U
Vinyl Chloride	2.0	U	U	U	U	U	U	U	U	U
1,3-Butadiene	2.0	U	U	U	U	U	U	U	U	U
Chloroethane	2.0	U	U	U	U	U	U	U	U	U
Acetone	10	17	4.8	2.0	U	U	U	U	U	U
Trichlorofluoromethane	2.0	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
Methylene Chloride	5.0	U	U	U	U	U	U	U	U	U
Trichlorotrifluoroethane	2.0	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	5.0	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ
2-Butanone (MEK)	2.0	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethane	2.0	U	U	U	U	U	U	U	U	U
n-Hexane	2.0	U	U	U	U	U	U	U	U	U
Chloroform	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	2.0	U	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U
Benzene	2.0	2.8	0.79	0.25	U	U	U	U	U	U
Carbon Tetrachloride	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	2.0	U	U	U	U	U	U	U	U	U
Bromodichloromethane	2.0	U	U	U	U	U	U	U	U	U
Trichloroethene	2.0	U	U	U	U	U	U	U	U	U
1,4-Dioxane	2.0	U	U	U	U	U	U	U	U	U
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	U	U	U	U	U	U	U
n-Heptane	2.0	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	2.0	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U
Toluene	2.0	3.3	0.94	0.25	U	U	U	U	U	U
2-Hexanone	2.0	U	U	U	U	U	U	U	U	U
Dibromochloromethane	2.0	U	U	U	U	U	U	U	U	U
1,2-Dibromoethane	2.0	U	U	U	U	U	U	U	U	U
n-Octane	2.0	U	U	U	U	U	U	U	U	U
Tetrachloroethene	2.0	U	U	U	U	U	U	U	U	U
Chlorobenzene	2.0	U	U	U	U	U	U	U	U	U
Ethylbenzene	2.0	U	U	U	U	U	U	U	U	U
m,p-Xylenes	4.0	U	U	U	U	U	U	U	U	U
Bromoform	2.0	U	U	U	U	U	U	U	U	U
Styrene	2.0	U	U	U	U	U	U	U	U	U
o-Xylene	2.0	U	U	U	U	U	U	U	U	U
n-Nonane	2.0	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	2.0	U	U	U	U	U	U	U	U	U
Cumene	2.0	U	U	U	U	U	U	U	U	U
n-Propylbenzene	2.0	U	U	U	U	U	U	U	U	U
3-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
4-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
2-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
n-Decane	2.0	8.6	2.4	0.42	U	U	U	U	U	U
1,3-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	U	U	U	U	U	U
1,2,3-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
1,2,4-Trichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
Naphthalene	2.0	U	U	U	U	U	U	U	U	U
Hexachlorobutadiene	2.0	U	U	U	U	U	U	U	U	U

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m³: ng/tube/sample volume in liter=ng/L=ug/m³.

ug/m³ to ppbv: conc. in ug/m³ X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Table 12.
Air Analytical Summary
VOC Analytical - Mansfield Trail Dump
March 29 - April 12, 2012

Sample ID:	AA-009-033012-001				AA-010-033012-001				AA-018-033012-001			
Date:	3/30/2012				3/30/2012				3/30/2012			
Sample Volume (liters):	3.9 Liter				4.03 Liter				4.0 Liter			
Matrix:	Air				Air				Air			
Volatiles:	ng/Tube	ng/Tube	ng/m ³	PPB(v/v)	ng/Tube	ng/m ³	PPB(v/v)	ng/Tube	ng/m ³	PPB(v/v)	ng/Tube	ng/m ³
Dichlorodifluoromethane (CFC 12)	2.0	2.0	0.52	0.10	U	U	U	2.1	0.52	0.10	U	U
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	U	U	U	U	U
Vinyl Chloride	2.0	U	U	U	U	U	U	U	U	U	U	U
1,3-Butadiene	2.0	U	U	U	U	U	U	U	U	U	U	U
Chloroethane	2.0	U	U	U	U	U	U	U	U	U	U	U
Acetone	10	11	2.9	1.2	U	U	U	U	U	U	U	U
Trichlorofluoromethane	2.0	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U	U	U
Methylene Chloride	5.0	U	U	U	U	U	U	U	U	U	U	U
Trichlorotrifluoroethane	2.0	U	U	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	5.0	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ
2-Butanone (MEK)	2.0	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	2.0	14	3.6	0.92	U	U	U	3.1	0.79	0.20	U	U
n-Hexane	2.0	U	U	U	U	U	U	U	U	U	U	U
Chloroform	2.0	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	2.0	U	U	U	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U	U	U
Benzene	2.0	U	U	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	2.0	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	2.0	U	U	U	U	U	U	U	U	U	U	U
Bromodichloromethane	2.0	U	U	U	U	U	U	U	U	U	U	U
Trichloroethene	2.0	4.8	1.2	0.23	U	U	U	2.0	0.50	0.094	U	U
1,4-Dioxane	2.0	U	U	U	U	U	U	U	U	U	U	U
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	U	U	U	U	U	U	U	U	U
n-Heptane	2.0	U	U	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	2.0	U	U	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U	U	U
Toluene	2.0	3.4	0.88	0.23	U	U	U	U	U	U	U	U
2-Hexanone	2.0	U	U	U	U	U	U	U	U	U	U	U
Dibromochloromethane	2.0	U	U	U	U	U	U	U	U	U	U	U
1,2-Dibromoethane	2.0	U	U	U	U	U	U	U	U	U	U	U
n-Octane	2.0	U	U	U	U	U	U	U	U	U	U	U
Tetrachloroethene	2.0	U	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	2.0	4.3	1.1	0.24	U	U	U	U	U	U	U	U
Ethylbenzene	2.0	U	U	U	U	U	U	U	U	U	U	U
m,p-Xylenes	4.0	4.5	1.1	0.26	U	U	U	U	U	U	U	U
Bromoform	2.0	U	U	U	U	U	U	U	U	U	U	U
Styrene	2.0	U	U	U	U	U	U	U	U	U	U	U
o-Xylene	2.0	2.8	0.73	0.17	U	U	U	U	U	U	U	U
n-Nonane	2.0	2.5	0.64	0.12	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	2.0	U	U	U	U	U	U	U	U	U	U	U
Cumene	2.0	U	U	U	U	U	U	U	U	U	U	U
n-Propylbenzene	2.0	4.7	1.2	0.25	U	U	U	U	U	U	U	U
3-Ethyltoluene	2.0	15	3.9	0.79	U	U	U	3.8	0.95	0.19	U	U
4-Ethyltoluene	2.0	7.1	1.8	0.37	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	2.0	11	2.8	0.56	U	U	U	2.7	0.68	0.14	U	U
2-Ethyltoluene	2.0	6.8	1.7	0.35	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	2.0	36	9.2	1.9	U	U	U	9.0	2.2	0.46	U	U
n-Decane	2.0	8.8	2.2	0.39	U	U	U	U	U	U	U	U
1,3-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	2.0	2.1	0.55	0.091	U	U	U	U	U	U	U	U
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	U	U	U	U	U	U	U	U
1,2,3-Trimethylbenzene	2.0	9.0	2.3	0.47	U	U	U	2.1	0.52	0.11	U	U
1,2-Dichlorobenzene	2.0	9.6	2.5	0.41	U	U	U	U	U	U	U	U
1,2,4-Trichlorobenzene	2.0	U	U	U	U	U	U	U	U	U	U	U
Naphthalene	2.0	U	U	U	U	U	U	U	U	U	U	U
Hexachlorobutadiene	2.0	U	U	U	U	U	U	U	U	U	U	U

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m³: ng/tube/sample volume in liter=ng/L=ug/m³.

ug/m³ to ppbv: conc. in ug/m³ X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Table 12.
Air Analytical Summary
VOC Analytical - Mansfield Trail Dump
March 29 - April 12, 2012

Sample ID		FB-033012-001			AA-011-040312-001			AA-017-040312-001		
Date		3/30/2012			4/3/2012			4/3/2012		
Sample Volume (liters)		NA			4.56 Liter			4.16 Liter		
Matrix		Air			Air			Air		
Volatiles	ng/Tube	ng/Tube	ug/m ³	PPE(%)	ng/Tube	ug/m ³	PPE(%)	ng/Tube	ug/m ³	PPE(%)
Dichlorodifluoromethane (CFC 12)	2.0	U	U	U	5.3	1.2	0.24	U	U	U
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	U	U	U
Vinyl Chloride	2.0	U	U	U	3.0	0.65	0.26	U	U	U
1,3-Butadiene	2.0	U	U	U	U	U	U	U	U	U
Chloroethane	2.0	U	U	U	U	U	U	U	U	U
Acetone	10	U	U	U	U	U	U	U	U	U
Trichlorofluoromethane	2.0	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
Methylene Chloride	5.0	U	U	U	U	U	U	U	U	U
Trichlorotrifluoroethane	2.0	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	5.0	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ
2-Butanone (MEK)	2.0	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	2.0	U	U	U	17	3.6	0.92	3.1	0.75	0.19
n-Hexane	2.0	U	U	U	U	U	U	U	U	U
Chloroform	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	2.0	U	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U
Benzene	2.0	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	2.0	U	U	U	U	U	U	U	U	U
Bromodichloromethane	2.0	U	U	U	U	U	U	U	U	U
Trichlorobenzene	2.0	U	U	U	3.0	0.66	0.12	U	U	U
1,4-Dioxane	2.0	U	U	U	U	U	U	U	U	U
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	U	U	U	U	U	U	U
n-Heptane	2.0	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	2.0	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U
Toluene	2.0	U	U	U	2.7	0.60	0.16	U	U	U
2-Hexanone	2.0	U	U	U	U	U	U	U	U	U
Dibromochloromethane	2.0	U	U	U	U	U	U	U	U	U
1,2-Dibromoethane	2.0	U	U	U	U	U	U	U	U	U
n-Octane	2.0	U	U	U	U	U	U	U	U	U
Tetrachloroethene	2.0	U	U	U	U	U	U	U	U	U
Chlorobenzene	2.0	U	U	U	4.6	1.0	0.22	U	U	U
Ethylbenzene	2.0	U	U	U	U	U	U	U	U	U
m,p-Xylenes	4.0	U	U	U	U	U	U	U	U	U
Bromoform	2.0	U	U	U	U	U	U	U	U	U
Styrene	2.0	U	U	U	U	U	U	U	U	U
o-Xylene	2.0	U	U	U	11	2.4	0.55	U	U	U
n-Nonane	2.0	U	U	U	2.2	0.48	0.092	U	U	U
1,1,2,2-Tetrachloroethane	2.0	U	U	U	U	U	U	U	U	U
Cumene	2.0	U	U	U	7.6	1.7	0.34	U	U	U
n-Propylbenzene	2.0	U	U	U	19	4.2	0.85	2.5	0.61	0.12
3-Ethyltoluene	2.0	U	U	U	47	10	2.1	6.1	1.5	0.30
4-Ethyltoluene	2.0	U	U	U	19	4.3	0.87	2.6	0.62	0.13
1,3,5-Trimethylbenzene	2.0	U	U	U	24	5.2	1.1	3.2	0.76	0.16
2-Ethyltoluene	2.0	U	U	U	19	4.1	0.84	2.4	0.59	0.12
1,2,4-Trimethylbenzene	2.0	U	U	U	86	19	3.8	11	2.7	0.55
n-Decane	2.0	U	U	U	7.7	1.7	0.29	U	U	U
1,3-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	2.0	U	U	U	3.2	0.69	0.12	U	U	U
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	U	U	U	U	U	U
1,2,3-Trimethylbenzene	2.0	U	U	U	21	4.6	0.94	2.7	0.64	0.13
1,2-Dichlorobenzene	2.0	U	U	U	16	3.5	0.59	U	U	U
1,2,4-Trichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
Naphthalene	2.0	U	U	U	U	U	U	U	U	U
Hexachlorobutadiene	2.0	U	U	U	U	U	U	U	U	U

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m³: ng/tube/sample volume in liter=ng/L=ug/m³.

ug/m³ to ppbv: conc. in ug/m³ X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Table 12.
Air Analytical Summary
VOC Analytical - Mansfield Trail Dump
March 29 - April 12, 2012

Sample ID		AA-017-040312-002			AA-018-040312-001			AA-019-040312-001		
Date		4/3/2012			4/3/2012			4/3/2012		
Sample Volume (liters)		4.25 Liter			3.77 Liter			4.2 Liter		
Matrix		Air			Air			Air		
Volatiles	ng/Tube	ng/Tube	ug/m ³	PPB(v/v)	ng/Tube	ug/m ³	PPB(v/v)	ng/Tube	ug/m ³	PPB(v/v)
Dichlorodifluoromethane (CFC 12)	2.0	U	U	U	U	U	U	3.5	0.83	0.17
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	U	U	U
Vinyl Chloride	2.0	U	U	U	U	U	U	2.9	0.70	0.27
1,3-Butadiene	2.0	U	U	U	U	U	U	U	U	U
Chloroethane	2.0	U	U	U	U	U	U	U	U	U
Acetone	10	U	U	U	10	2.7	1.1	15	3.7	1.5
Trichlorofluoromethane	2.0	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
Methylene Chloride	5.0	U	U	U	U	U	U	U	U	U
Trichlorotrifluoroethane	2.0	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	5.0	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ
2-Butanone (MEK)	2.0	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	2.0	U	U	U	U	U	U	34	8.0	2.0
n-Hexane	2.0	U	U	U	U	U	U	U	U	U
Chloroform	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	2.0	U	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U
Benzene	2.0	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	2.0	U	U	U	U	U	U	U	U	U
Bromodichloromethane	2.0	U	U	U	U	U	U	U	U	U
Trichloroethene	2.0	U	U	U	U	U	U	4.0	0.96	0.18
1,4-Dioxane	2.0	U	U	U	U	U	U	U	U	U
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	U	U	U	U	U	U	U
n-Heptane	2.0	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	2.0	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U
Toluene	2.0	U	U	U	U	U	U	9.3	2.2	0.59
2-Hexanone	2.0	U	U	U	U	U	U	U	U	U
Dibromochloromethane	2.0	U	U	U	U	U	U	U	U	U
1,2-Dibromoethane	2.0	U	U	U	U	U	U	U	U	U
n-Octane	2.0	U	U	U	U	U	U	4.4	1.1	0.23
Tetrachloroethene	2.0	U	U	U	U	U	U	U	U	U
Chlorobenzene	2.0	U	U	U	U	U	U	19	4.4	0.96
Ethylbenzene	2.0	U	U	U	U	U	U	2.2	0.52	0.12
m,p-Xylenes	4.0	U	U	U	U	U	U	9.6	2.3	0.52
Bromoform	2.0	U	U	U	U	U	U	U	U	U
Styrene	2.0	U	U	U	U	U	U	U	U	U
o-Xylene	2.0	U	U	U	U	U	U	21	5.0	1.2
n-Nonane	2.0	U	U	U	U	U	U	15	3.5	0.67
1,1,2,2-Tetrachloroethane	2.0	U	U	U	U	U	U	U	U	U
Cumene	2.0	U	U	U	U	U	U	17	4.0	0.81
n-Propylbenzene	2.0	U	U	U	U	U	U	55	13	2.6
3-Ethyltoluene	2.0	2.8	0.66	0.13	U	U	U	160 J	39 J	7.9 J
4-Ethyltoluene	2.0	U	U	U	U	U	U	72	17	3.5
1,3,5-Trimethylbenzene	2.0	U	U	U	U	U	U	96	23	4.7
2-Ethyltoluene	2.0	U	U	U	U	U	U	71	17	3.5
1,2,4-Trimethylbenzene	2.0	U	U	U	U	U	U	370 J	89 J	18 J
n-Decane	2.0	U	U	U	U	U	U	49	12	2.0
1,3-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	2.0	U	U	U	U	U	U	7.3	1.7	0.29
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	U	U	U	9.6	2.3	0.42
1,2,3-Trimethylbenzene	2.0	U	U	U	U	U	U	87	21	4.2
1,2-Dichlorobenzene	2.0	U	U	U	U	U	U	31	7.3	1.2
1,2,4-Trichlorobenzene	2.0	6.3	1.5	0.30	U	U	U	U	U	U
Naphthalene	2.0	U	U	U	U	U	U	3.1	0.73	0.14
Hexachlorobutadiene	2.0	U	U	U	U	U	U	U	U	U

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m³: ng/tube/sample volume in liter=ng/L=ug/m³.

ug/m³ to ppbv: conc. in ug/m³ X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Table 12.
Air Analytical Summary
VOC Analytical - Mansfield Trail Dump
March 29 - April 12, 2012

Sample ID:		FB-0040312-001			AA-010-041012-001			AA-010-041012-002		
Date:		4/3/2012			4/10/2012			4/10/2012		
Sample Volume (liters)		NA			3.99 Liter			3.99 Liter		
Matrix:		Air			Air			Air		
Volatiles:	ng/Tube	ng/Tube	ng/m ³	PPE(V/V)	ng/Tube	ng/m ³	PPE(V/V)	ng/Tube	ng/m ³	PPE(V/V)
Dichlorodifluoromethane (CFC 12)	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	U	U	U
Vinyl Chloride	2.0	U	U	U	U	U	U	U	U	U
1,3-Butadiene	2.0	U	U	U	U	U	U	U	U	U
Chloroethane	2.0	U	U	U	U	U	U	U	U	U
Acetone	10	U	U	U	13	3.2	1.3	21	5.4	2.3
Trichlorofluoromethane	2.0	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
Methylene Chloride	5.0	U	U	U	U	U	U	U	U	U
Trichlorotrifluoroethane	2.0	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	5.0	U	U	U	U	U	U	U	U	U
2-Butanone (MEK)	2.0	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
n-Hexane	2.0	U	U	U	2.1	0.53	0.15	11	2.7	0.77
Chloroform	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	2.0	U	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U
Benzene	2.0	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	2.0	U	U	U	U	U	U	U	U	U
Bromodichloromethane	2.0	U	U	U	U	U	U	U	U	U
Trichloroethene	2.0	U	U	U	U	U	U	U	U	U
1,4-Dioxane	2.0	U	U	U	U	U	U	U	U	U
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	U	U	U	U	U	U	U
n-Heptane	2.0	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	2.0	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U
Toluene	2.0	U	U	U	U	U	U	U	U	U
2-Hexanone	2.0	U	U	U	U	U	U	U	U	U
Dibromochloromethane	2.0	U	U	U	U	U	U	U	U	U
1,2-Dibromoethane	2.0	U	U	U	U	U	U	U	U	U
n-Octane	2.0	U	U	U	2.2	0.55	0.12	U	U	U
Tetrachloroethene	2.0	U	U	U	U	U	U	U	U	U
Chlorobenzene	2.0	U	U	U	U	U	U	U	U	U
Ethylbenzene	2.0	U	U	U	U	U	U	U	U	U
m,p-Xylenes	4.0	U	U	U	U	U	U	U	U	U
Bromoform	2.0	U	U	U	U	U	U	U	U	U
Styrene	2.0	U	U	U	U	U	U	U	U	U
o-Xylene	2.0	U	U	U	U	U	U	U	U	U
n-Nonane	2.0	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	2.0	U	U	U	U	U	U	U	U	U
Cumene	2.0	U	U	U	U	U	U	U	U	U
n-Propylbenzene	2.0	U	U	U	U	U	U	U	U	U
3-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
4-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
2-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
n-Decane	2.0	U	U	U	7.3	1.8	0.31	U	U	U
1,3-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	U	U	U	U	U	U
1,2,3-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
1,2,4-Trichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
Naphthalene	2.0	U	U	U	U	U	U	U	U	U
Hexachlorobutadiene	2.0	U	U	U	U	U	U	U	U	U

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m3: ng/tube/sample volume in liter=ng/L=ug/m3.

ug/m3 to ppbv: conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Table 12.
Air Analytical Summary
VOC Analytical - Mansfield Trail Dump
March 29 - April 12, 2012

Sample ID:		AA-017-041012-001			AA-017-041012-002			AA-018-041012-001		
Date:		4/10/2012			4/10/2012			4/10/2012		
Sample Volume (liters)		4.32 Liter			4.32 Liter			4.36 Liter		
Matrix:		Air			Air			Air		
Volatiles:	ng/Tube	ng/Tube	ug/m ³	PPBV/vv	ng/Tube	ug/m ³	PPBV/vv	ng/Tube	ug/m ³	PPBV/vv
Dichlorodifluoromethane (CFC 12)	2.0	U	U	U	U	U	U	2.1	0.47	0.095
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	U	U	U
Vinyl Chloride	2.0	U	U	U	U	U	U	U	U	U
1,3-Butadiene	2.0	U	U	U	U	U	U	U	U	U
Chloroethane	2.0	U	U	U	U	U	U	U	U	U
Acetone	10	18	4.2	1.8	U	U	U	13	2.9	1.2
Trichlorofluoromethane	2.0	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
Methylene Chloride	5.0	U	U	U	U	U	U	U	U	U
Trichlorotrifluoroethane	2.0	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	5.0	UJ	UJ	UJ	U	U	U	U	U	U
2-Butanone (MEK)	2.0	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	2.0	U	U	U	U	U	U	30	6.8	1.7
n-Hexane	2.0	2.2	0.52	0.15	U	U	U	3.3	0.76	0.21
Chloroform	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	2.0	U	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U
Benzene	2.0	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	2.0	U	U	U	U	U	U	U	U	U
Bromodichloromethane	2.0	U	U	U	U	U	U	U	U	U
Trichloroethene	2.0	U	U	U	2.3	0.53	0.098	17	3.9	0.72
1,4-Dioxane	2.0	U	U	U	U	U	U	U	U	U
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	U	U	U	U	U	U	U
n-Heptane	2.0	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	2.0	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U
Toluene	2.0	2.0	0.47	0.12	U	U	U	5.1	1.2	0.31
2-Hexanone	2.0	U	U	U	U	U	U	U	U	U
Dibromochloromethane	2.0	U	U	U	U	U	U	U	U	U
1,2-Dibromoethane	2.0	U	U	U	U	U	U	U	U	U
n-Octane	2.0	4.1	0.95	0.20	U	U	U	3.0	0.69	0.15
Tetrachloroethene	2.0	U	U	U	U	U	U	U	U	U
Chlorobenzene	2.0	U	U	U	U	U	U	9.2	2.1	0.46
Ethylbenzene	2.0	U	U	U	U	U	U	U	U	U
m,p-Xylenes	4.0	U	U	U	U	U	U	U	U	U
Bromoform	2.0	U	U	U	U	U	U	U	U	U
Styrene	2.0	U	U	U	U	U	U	U	U	U
o-Xylene	2.0	U	U	U	U	U	U	U	U	U
n-Nonane	2.0	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	2.0	U	U	U	U	U	U	U	U	U
Cumene	2.0	U	U	U	U	U	U	U	U	U
n-Propylbenzene	2.0	U	U	U	U	U	U	U	U	U
3-Ethyltoluene	2.0	U	U	U	U	U	U	4.4	1.0	0.21
4-Ethyltoluene	2.0	U	U	U	U	U	U	2.3	0.52	0.11
1,3,5-Trimethylbenzene	2.0	U	U	U	U	U	U	3.2	0.72	0.15
2-Ethyltoluene	2.0	U	U	U	U	U	U	2.3	0.52	0.11
1,2,4-Trimethylbenzene	2.0	U	U	U	U	U	U	11	2.4	0.49
n-Decane	2.0	12	2.7	0.46	U	U	U	8.0	1.8	0.31
1,3-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	2.0	U	U	U	U	U	U	4.5	1.0	0.17
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	U	U	U	U	U	U
1,2,3-Trimethylbenzene	2.0	U	U	U	U	U	U	3.4	0.77	0.16
1,2-Dichlorobenzene	2.0	U	U	U	U	U	U	19	4.3	0.71
1,2,4-Trichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
Naphthalene	2.0	U	U	U	U	U	U	U	U	U
Hexachlorobutadiene	2.0	U	U	U	U	U	U	U	U	U

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m³: ng/tube/sample volume in liter=ng/L=ug/m³.

ug/m³ to ppbv: conc. in ug/m³ X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Table 12.
Air Analytical Summary
VOC Analytical - Mansfield Trail Dump
March 29 - April 12, 2012

Sample ID:		AA-FB-041012-001				AA-010-041112-001			AA-011-041112-001		
Date:		4/10/2012				4/11/2012			4/11/2012		
Sample Volume (liters)		NA				3.96 Liter			4.22 Liter		
Matrix:		Air				Air			Air		
Volatiles:	ng/Tube	ng/Tube	ng/m	PPE(v/v)	ng/Tube	ng/m	PPE(v/v)	ng/Tube	ng/m	PPE(v/v)	
Dichlorodifluoromethane (CFC 12)	2.0	U	U	U	U	U	U	6.0	1.4	0.29	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	U	U	U	
Vinyl Chloride	2.0	U	U	U	U	U	U	U	U	U	
1,3-Butadiene	2.0	U	U	U	U	U	U	U	U	U	
Chloroethane	2.0	U	U	U	U	U	U	U	U	U	
Acetone	10	U	U	U	23	5.7	2.4	13	3.2	1.3	
Trichlorofluoromethane	2.0	U	U	U	U	U	U	2.7	0.65	0.12	
1,1-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U	
Methylene Chloride	5.0	U	U	U	U	U	U	9.0	2.1	0.61	
Trichlorotrifluoroethane	2.0	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U	
1,1-Dichloroethane	5.0	U	U	U	U	U	U	8.3	2.0	0.49	
2-Butanone (MEK)	2.0	U	U	U	U	U	U	2.1 J	0.50 J	0.17 J	
cis-1,2-Dichloroethene	2.0	U	U	U	U	U	U	220 J	53 J	13 J	
n-Hexane	2.0	U	U	U	3.1	0.77	0.22	3.0	0.72	0.20	
Chloroform	2.0	U	U	U	U	U	U	4.9	1.2	0.24	
1,2-Dichloroethane	2.0	U	U	U	U	U	U	U	U	U	
1,1,1-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U	
Benzene	2.0	U	U	U	U	U	U	U	U	U	
Carbon Tetrachloride	2.0	U	U	U	U	U	U	U	U	U	
1,2-Dichloropropane	2.0	U	U	U	U	U	U	U	U	U	
Bromodichloromethane	2.0	U	U	U	U	U	U	U	U	U	
Trichloroethene	2.0	U	U	U	U	U	U	180 J	43 J	8.0 J	
1,4-Dioxane	2.0	U	U	U	U	U	U	U	U	U	
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	U	U	U	U	U	U	U	
n-Heptane	2.0	U	U	U	U	U	U	U	U	U	
4-Methyl-2-pentanone	2.0	U	U	U	U	U	U	U	U	U	
1,1,2-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U	
Toluene	2.0	U	U	U	U	U	U	31	7.3	1.9	
2-Hexanone	2.0	U	U	U	U	U	U	U	U	U	
Dibromochloromethane	2.0	U	U	U	U	U	U	U	U	U	
1,2-Dibromoethane	2.0	U	U	U	U	U	U	U	U	U	
n-Octane	2.0	U	U	U	U	U	U	U	U	U	
Tetrachloroethene	2.0	U	U	U	U	U	U	U	U	U	
Chlorobenzene	2.0	U	U	U	U	U	U	49	12	2.5	
Ethylbenzene	2.0	U	U	U	U	U	U	U	U	U	
m,p-Xylenes	4.0	U	U	U	U	U	U	U	U	U	
Bromoform	2.0	U	U	U	U	U	U	U	U	U	
Styrene	2.0	U	U	U	U	U	U	U	U	U	
o-Xylene	2.0	U	U	U	U	U	U	2.1	0.49	0.11	
n-Nonane	2.0	U	U	U	U	U	U	3.2	0.75	0.14	
1,1,2,2-Tetrachloroethane	2.0	U	U	U	U	U	U	U	U	U	
Cumene	2.0	U	U	U	U	U	U	U	U	U	
n-Propylbenzene	2.0	U	U	U	U	U	U	2.3	0.54	0.11	
3-Ethyltoluene	2.0	U	U	U	U	U	U	6.1	1.4	0.29	
4-Ethyltoluene	2.0	U	U	U	U	U	U	2.9	0.70	0.14	
1,3,5-Trimethylbenzene	2.0	U	U	U	U	U	U	4.3	1.0	0.21	
2-Ethyltoluene	2.0	U	U	U	U	U	U	2.8	0.66	0.13	
1,2,4-Trimethylbenzene	2.0	U	U	U	U	U	U	14	3.4	0.68	
n-Decane	2.0	U	U	U	2.9	0.73	0.12	17	3.9	0.67	
1,3-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U	
1,4-Dichlorobenzene	2.0	U	U	U	U	U	U	40	9.5	1.6	
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	U	U	U	2.1	0.49	0.090	
1,2,3-Trimethylbenzene	2.0	U	U	U	U	U	U	4.6	1.1	0.22	
1,2-Dichlorobenzene	2.0	U	U	U	U	U	U	170 J	40 J	6.7 J	
1,2,4-Trichlorobenzene	2.0	U	U	U	U	U	U	U	U	U	
Naphthalene	2.0	U	U	U	U	U	U	U	U	U	
Hexachlorobutadiene	2.0	U	U	U	U	U	U	U	U	U	

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m3: ng/tube/sample volume in liter=ng/L=ug/m3.

ug/m3 to ppbv: conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Table 12.
Air Analytical Summary
VOC Analytical - Mansfield Trail Dump
March 29 - April 12, 2012

Sample ID:		AA-012-041112-001			AA-020-041112-001			FB-041112-001		
Date:		4/11/2012			4/11/2012			4/11/2012		
Sample Volume (liters):		4.15 Liter			4.08 Liter			NA		
Matrix:		Air			Air			Air		
Volatiles	ng/Tube	ng/Tube	ug/m ³	PPB(v/v)	ng/Tube	ug/m ³	PPB(v/v)	ng/Tube	ug/m ³	PPB(v/v)
Dichlorodifluoromethane (CFC 12)	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	U	U	U
Vinyl Chloride	2.0	U	U	U	U	U	U	U	U	U
1,3-Butadiene	2.0	U	U	U	U	U	U	U	U	U
Chloroethane	2.0	U	U	U	U	U	U	U	U	U
Acetone	10	17	4.2	1.8	U	U	U	U	U	U
Trichlorofluoromethane	2.0	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
Methylene Chloride	5.0	U	U	U	U	U	U	U	U	U
Trichlorotrifluoroethane	2.0	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	5.0	U	U	U	U	U	U	U	U	U
2-Butanone (MEK)	2.0	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	2.0	2.5	0.60	0.15	U	U	U	U	U	U
n-Hexane	2.0	U	U	U	U	U	U	U	U	U
Chloroform	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	2.0	U	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U
Benzene	2.0	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	2.0	U	U	U	U	U	U	U	U	U
Bromodichloromethane	2.0	U	U	U	U	U	U	U	U	U
Trichloroethene	2.0	3.3	0.79	0.15	U	U	U	U	U	U
1,4-Dioxane	2.0	U	U	U	U	U	U	U	U	U
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	U	U	U	U	U	U	U
n-Heptane	2.0	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	2.0	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U
Toluene	2.0	2.8	0.67	0.18	U	U	U	U	U	U
2-Hexanone	2.0	U	U	U	U	U	U	U	U	U
Dibromochloromethane	2.0	U	U	U	U	U	U	U	U	U
1,2-Dibromoethane	2.0	U	U	U	U	U	U	U	U	U
n-Octane	2.0	U	U	U	U	U	U	U	U	U
Tetrachloroethene	2.0	U	U	U	U	U	U	U	U	U
Chlorobenzene	2.0	U	U	U	U	U	U	U	U	U
Ethylbenzene	2.0	U	U	U	U	U	U	U	U	U
m,p-Xylenes	4.0	U	U	U	U	U	U	U	U	U
Bromoform	2.0	U	U	U	U	U	U	U	U	U
Styrene	2.0	U	U	U	U	U	U	U	U	U
o-Xylene	2.0	U	U	U	U	U	U	U	U	U
n-Nonane	2.0	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	2.0	U	U	U	U	U	U	U	U	U
Cumene	2.0	U	U	U	U	U	U	U	U	U
n-Propylbenzene	2.0	U	U	U	U	U	U	U	U	U
3-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
4-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
2-Ethyltoluene	2.0	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
n-Decane	2.0	9.7	2.3	0.40	U	U	U	U	U	U
1,3-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	U	U	U	U	U	U
1,2,3-Trimethylbenzene	2.0	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	2.0	4.8	1.2	0.19	U	U	U	U	U	U
1,2,4-Trichlorobenzene	2.0	U	U	U	U	U	U	U	U	U
Naphthalene	2.0	U	U	U	U	U	U	U	U	U
Hexachlorobutadiene	2.0	U	U	U	U	U	U	U	U	U

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m³: ng/tube/sample volume in liter=ng/L=ug/m³.

ug/m³ to ppbv: conc. in ug/m³ X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Table 12.
Air Analytical Summary
VOC Analytical - Mansfield Trail Dump
March 29 - April 12, 2012

Sample ID:		AA-000-041212-001				AA-011-041212-001			AA-017-041212-001		
Date:		4/12/2012				4/12/2012			4/12/2012		
Sample Volume (liters)		4.26 Liter				2.44 Liter			2.96 Liter		
Matrix:		Air				Air			Air		
Volatiles	ng/Tube	ng/Tube	ug/m	PPE(ug)	ng/Tube	ug/m	PPE(ug)	ng/Tube	ug/m	PPE(ug)	
Dichlorodifluoromethane (CFC 12)	2.0	U	U	U	U	U	U	3.9	1.3	0.27	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U	U	U	U	
Vinyl Chloride	2.0	U	U	U	U	U	U	U	U	U	
1,3-Butadiene	2.0	U	U	U	U	U	U	U	U	U	
Chloroethane	2.0	U	U	U	U	U	U	U	U	U	
Acetone	10	22	5.2	2.2	60	24	10	24	8.0	3.3	
Trichlorofluoromethane	2.0	U	U	U	U	U	U	U	U	U	
1,1-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U	
Methylene Chloride	5.0	U	U	U	U	U	U	U	U	U	
Trichlorotrifluoroethane	2.0	U	U	U	U	U	U	U	U	U	
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U	U	U	U	
1,1-Dichloroethane	5.0	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	
2-Butanone (MEK)	2.0	U	U	U	4.8 J	2.0 J	0.67 J	U	U	U	
cis-1,2-Dichloroethene	2.0	U	U	U	U	U	U	5.4	1.8	0.46	
n-Hexane	2.0	6.0 U	1.4 U	0.40 U	52	21	6.0	13 U	4.3 U	1.2 U	
Chloroform	2.0	U	U	U	U	U	U	U	U	U	
1,2-Dichloroethane	2.0	U	U	U	U	U	U	U	U	U	
1,1,1-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U	
Benzene	2.0	4.8	1.1	0.35	3.2	1.3	0.41	2.1	0.71	0.22	
Carbon Tetrachloride	2.0	U	U	U	U	U	U	U	U	U	
1,2-Dichloropropane	2.0	U	U	U	U	U	U	U	U	U	
Bromodichloromethane	2.0	U	U	U	U	U	U	U	U	U	
Trichloroethene	2.0	U	U	U	2.2	0.89	0.17	8.5	2.9	0.54	
1,4-Dioxane	2.0	U	U	U	U	U	U	U	U	U	
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	U	U	U	U	U	U	U	
n-Heptane	2.0	U	U	U	U	U	U	U	U	U	
4-Methyl-2-pentanone	2.0	U	U	U	U	U	U	U	U	U	
1,1,2-Trichloroethane	2.0	U	U	U	U	U	U	U	U	U	
Toluene	2.0	U	U	U	19	7.6	2.0	4.3 U	1.4 U	0.38 U	
2-Hexanone	2.0	U	U	U	U	U	U	U	U	U	
Dibromochloromethane	2.0	U	U	U	U	U	U	U	U	U	
1,2-Dibromoethane	2.0	U	U	U	U	U	U	U	U	U	
n-Octane	2.0	U	U	U	2.8	1.1	0.24	U	U	U	
Tetrachloroethene	2.0	U	U	U	U	U	U	U	U	U	
Chlorobenzene	2.0	U	U	U	U	U	U	10	3.5	0.75	
Ethylbenzene	2.0	U	U	U	U	U	U	U	U	U	
m,p-Xylenes	4.0	U	U	U	U	U	U	U	U	U	
Bromoform	2.0	U	U	U	U	U	U	U	U	U	
Styrene	2.0	U	U	U	U	U	U	U	U	U	
o-Xylene	2.0	U	U	U	U	U	U	5.1	1.7	0.40	
n-Nonane	2.0	U	U	U	U	U	U	U	U	U	
1,1,2,2-Tetrachloroethane	2.0	U	U	U	U	U	U	U	U	U	
Cumene	2.0	U	U	U	U	U	U	3.4	1.2	0.24	
n-Propylbenzene	2.0	U	U	U	U	U	U	9.5	3.2	0.65	
3-Ethyltoluene	2.0	U	U	U	3.3	1.3	0.27	23	7.9	1.6	
4-Ethyltoluene	2.0	U	U	U	U	U	U	11	3.7	0.75	
1,3,5-Trimethylbenzene	2.0	U	U	U	U	U	U	12	4.1	0.84	
2-Ethyltoluene	2.0	U	U	U	U	U	U	9.3	3.2	0.64	
1,2,4-Trimethylbenzene	2.0	U	U	U	6.1	2.5	0.51	44	15	3.0	
n-Decane	2.0	5.2 U	1.2 U	0.21 U	38 U	16 U	2.7 U	9.5 U	3.2 U	0.55 U	
1,3-Dichlorobenzene	2.0	U	U	U	U	U	U	U	U	U	
1,4-Dichlorobenzene	2.0	U	U	U	U	U	U	8.8	3.0	0.49	
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	U	U	U	U	U	U	
1,2,3-Trimethylbenzene	2.0	U	U	U	U	U	U	12	3.9	0.80	
1,2-Dichlorobenzene	2.0	U	U	U	4.3	1.8	0.29	38	13	2.2	
1,2,4-Trichlorobenzene	2.0	U	U	U	U	U	U	U	U	U	
Naphthalene	2.0	U	U	U	U	U	U	U	U	U	
Hexachlorobutadiene	2.0	U	U	U	U	U	U	U	U	U	

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m3: ng/tube/sample volume in liter=ng/L=ug/m3.

ug/m3 to ppbv: conc. in ug/m3 X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Table 12.
Air Analytical Summary
VOC Analytical - Mansfield Trail Dump
March 29 - April 12, 2012

Sample ID:	AA-021-041212-001				FB-041212-001		
Date:	4/12/2012				4/12/2012		
Sample Volume (liters)	3.71 Liter				NA		
Matrix:	Air				Air		
Volatiles	ng/Tube	ng/Tube	ug/m ³	PPB (v/v)	ng/Tube	ug/m ³	PPB (v/v)
Dichlorodifluoromethane (CFC 12)	2.0	U	U	U	U	U	U
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.0	U	U	U	U	U	U
Vinyl Chloride	2.0	U	U	U	U	U	U
1,3-Butadiene	2.0	U	U	U	U	U	U
Chloroethane	2.0	U	U	U	U	U	U
Acetone	10	18	4.9	2.1	U	U	U
Trichlorofluoromethane	2.0	U	U	U	U	U	U
1,1-Dichloroethene	2.0	U	U	U	U	U	U
Methylene Chloride	5.0	U	U	U	U	U	U
Trichlorotrifluoroethane	2.0	U	U	U	U	U	U
trans-1,2-Dichloroethene	2.0	U	U	U	U	U	U
1,1-Dichloroethane	5.0	U	U	U	U	U	U
2-Butanone (MEK)	2.0	U	U	U	U	U	U
cis-1,2-Dichloroethene	2.0	U	U	U	U	U	U
n-Hexane	2.0	U	U	U	4.8	U	U
Chloroform	2.0	U	U	U	U	U	U
1,2-Dichloroethane	2.0	U	U	U	U	U	U
1,1,1-Trichloroethane	2.0	U	U	U	U	U	U
Benzene	2.0	U	U	U	U	U	U
Carbon Tetrachloride	2.0	U	U	U	U	U	U
1,2-Dichloropropane	2.0	U	U	U	U	U	U
Bromodichloromethane	2.0	U	U	U	U	U	U
Trichloroethene	2.0	U	U	U	U	U	U
1,4-Dioxane	2.0	U	U	U	U	U	U
2,2,4-Trimethylpentane (Isooctane)	2.0	U	U	U	U	U	U
n-Heptane	2.0	U	U	U	U	U	U
4-Methyl-2-pentanone	2.0	U	U	U	U	U	U
1,1,2-Trichloroethane	2.0	U	U	U	U	U	U
Toluene	2.0	U	U	U	2.3	U	U
2-Hexanone	2.0	U	U	U	U	U	U
Dibromochloromethane	2.0	U	U	U	U	U	U
1,2-Dibromoethane	2.0	U	U	U	U	U	U
n-Octane	2.0	U	U	U	U	U	U
Tetrachloroethene	2.0	U	U	U	U	U	U
Chlorobenzene	2.0	U	U	U	U	U	U
Ethylbenzene	2.0	U	U	U	U	U	U
m,p-Xylenes	4.0	U	U	U	U	U	U
Bromoform	2.0	U	U	U	U	U	U
Styrene	2.0	U	U	U	U	U	U
o-Xylene	2.0	U	U	U	U	U	U
n-Nonane	2.0	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	2.0	U	U	U	U	U	U
Cumene	2.0	U	U	U	U	U	U
n-Propylbenzene	2.0	U	U	U	U	U	U
3-Ethyltoluene	2.0	U	U	U	U	U	U
4-Ethyltoluene	2.0	U	U	U	U	U	U
1,3,5-Trimethylbenzene	2.0	U	U	U	U	U	U
2-Ethyltoluene	2.0	U	U	U	U	U	U
1,2,4-Trimethylbenzene	2.0	U	U	U	U	U	U
n-Decane	2.0	5.6 U	1.5 U	0.26 U	14	U	U
1,3-Dichlorobenzene	2.0	U	U	U	U	U	U
1,4-Dichlorobenzene	2.0	U	U	U	U	U	U
4-Isopropyltoluene (p-Cymene)	2.0	U	U	U	U	U	U
1,2,3-Trimethylbenzene	2.0	U	U	U	U	U	U
1,2-Dichlorobenzene	2.0	U	U	U	U	U	U
1,2,4-Trichlorobenzene	2.0	U	U	U	U	U	U
Naphthalene	2.0	U	U	U	U	U	U
Hexachlorobutadiene	2.0	U	U	U	U	U	U

Note: - Sample results and Method Reporting Limit (MRL) reported have been adjusted to reflect the sample volume, molecular weight of compound and factor 24.46 (related to the gas constant).

ng/L to ug/m³: ng/tube/sample volume in liter=ng/L=ug/m³.

ug/m³ to ppbv: conc. in ug/m³ X 24.46/particular compounds molecular weight.

U - Not Detected

J - estimated value

Attachment C-3:

Chain of Custody Records

FRB: 214

Contact Name: Brittney Kelly
Contact Phone: 908-565-2975

DateShipped: 3/13/2012

Lab: Columbia Analytical Services
732-906-6886

Special Instructions: 48 hr Turn-Around Time	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

[illegible]

RFP: 214
Contact Name: Brittney Kelly
Contact Phone: 908-565-2975

No: 2-031412-194515-0005
DateShipped: 3/13/2012
Lab: Columbia Analytical Services
732-906-6886

[illegible]

Special Instructions: 48 hr Turn Around Time

**SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #**

60c Wet & Cool Ice

[illegible]

Contact Name: Brittney Kelly
Contact Phone: 908-565-2975

Lab: Columbia Analytical Services
732-906-6886

CS. OK
TO

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

[illegible]

RFP: 214

Contact Phone: 908-565-2975

P1201058

No: 2-031912-170842-0010

AirbillNo: 864048331690

Lab: Columbia Analytical Services

Lab Phone: 805-526-7161

[illegible]

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

50c 6/17/74 TB CS OK

[illegible]

Contact Phone: 908-914-5718

Lab Phone: 805-526-7161

[illegible]

No: 2-032312-124758-0012

AirbillNo: 857852545102

Lab: Columbia Analytical Services
Lab Phone: 805-526-7161

<p>Special Instructions: 48 hour turn around time. Please include results in EDD format. Thank you.</p>	<p>SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #</p>
---	--

Items/Reason	Relinquished by	Date	Received by	Date	Time
All items for analysis	[Signature]	3/23/12	[Signature]	3/23/12	CARL

Date Shipped: 3/19/12
 Weston Solutions, Inc.
 1090 King Georges Post Rd
 Edison, NJ 08837

CHAIN OF CUSTODY RECORD

RFP: 214

Contact Name: Brittney Kelly
 Contact Phone: 908-565-2975

P1201180

No: 2-032612-134722-0013

Airbill No: 857852545113

Lab: Columbia Analytical Services

Lab Phone: 805-526-7161

Lab #	Sample #	Location	Sub Location	Analyses	Matrix	Collected	Sample Time	Container	Volume	Vol Units	Avg Flow	Flow Unit	Preservative
①	AA-005-032612-001	AA-005	Dump Area D NE	VOC	Air	3/26/2012	10:10	TD Carbo 300 sorbent	4.29	Liters	0.1072	mL/min	4 C
②	AA-011-032612-001	AA-011	Dump Area D SW	VOC	Air	3/26/2012	10:20	TD Carbo 300 sorbent	4.13	Liters	0.1033	mL/min	4 C
③	AA-016-032612-001	AA-016	Dump Area D W	VOC	Air	3/26/2012	10:25	TD Carbo 300 sorbent	4.04	Liters	0.1009	mL/min	4 C
④	AA-017-032612-001	AA-017	Dump Area D S	VOC	Air	3/26/2012	10:15	TD Carbo 300 sorbent	3.98	Liters	0.0985	mL/min	4 C
⑤	FB-032612-001	Outside Site Trailer		VOC	Air	3/26/2012	07:30	TD Carbo 300 sorbent		Liters		mL/min	4 C

Special Instructions: 48 hour turn around time. Please include results in EDD format and excel format. Thank you.

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

50c Gel Trc CSK

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
ALL ITEMS/ for analysis	R. S. Kelly	3/26/12	Weston	3/26/12	09:25						

RFP: 214
Contact Name: Brittney Kelly
Contact Phone: 908-565-2975

No: 2-032712-152046-0015
AirbillNo: 873981760011
Lab: Columbia Analytical Services
Lab Phone: 908-789-8900

<p>Special Instructions: 48 hour turn around time. Please include results in EDD format and excel format. Thank you.</p>	<p>SAMPLES TRANSFERRED FROM</p> <p>CHAIN OF CUSTODY #</p>
--	---

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All samples for analysis	<i>[Signature]</i>	3/27/12	<i>[Signature]</i>	3/28/12	0950						

RFP: 214

Contact Name: Brittney Kelly
Contact Phone: 908-565-2975

P1201217
No: 2-032812-165122-0017
AirbillNo: 873981760022
Lab: Columbia Analytical Services
Lab Phone: 805-526-7161

[illegible]

Special Instructions: 48 hour turn around time. Please include results in EDD format and excel format. Thank you.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

[illegible]

Edison, NJ 08837

CHAIN OF CUSTODY RECORD

RFP: 214

Contact Name: Brittney Kelly

Contact Phone: 908-565-2975

P1201232

No: 2-032912-172441-0019

AirbillNo: 873981760033

Lab: Columbia Analytical Services

Lab Phone: 805-526-7161

[illegible]

Special Instructions: 48 hour turn around time. Please include results in EDD format and excel format. Thank you. *CS OK*

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

[illegible]

RFP: 214

Contact Name: Brittney Kelly

Contact Phone: 908-565-2975

P1202155

No: 2-033012-135904-0020

AirbillNo: 873981760044

Lab: Columbia Analytical Services

Lab Phone: 805-526-7161

[illegible]

Special Instructions: 48 hour turn around time. Please include results in EDD format and excel format. Thank you.

**SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #**

[illegible]

RFP: 214

Contact Name: Brittney Kelly
Contact Phone: 908-565-2975

P1201309

No: 2-040312-162203-0021

AirbillNo: 873981760055

Lab: Columbia Analytical Services

Lab Phone: 805-526-7161

[illegible]

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

30 = better CSOK

[illegible]

Weston Solutions, Inc.
1090 King Georges Post Rd
Edison, NJ 08837

CHAIN OF CUSTODY RECORD

RFP: 214

Contact Name: Brittney Kelly
Contact Phone: 908-565-2975

91201405

No: 2-041012-145759-0022

AirbillNo: 873981760066

Lab: Columbia Analytical Services

Lab Phone: 805-526-7161

[illegible]

Special Instructions: 48 hour turn around time. Please include results in EDD format and excel format. Thank you. *CS ok*

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

[illegible]

RFP: 214

Contact Name: Brittney Kelly
Contact Phone: 908-565-2975

P1251424

No: 2-041112-113436-0023

AirbillNo: 873981760077

Lab: Columbia Analytical Services

Lab Phone: 805-526-7161

[illegible]

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

[illegible]

RFP: 214

Contact Name: Brittney Kelly
Contact Phone: 908-565-2975

No: 2-041212-171459-0024

Airbill No: 873981760088

Lab: Columbia Analytical Services

Lab Phone: 805-526-7161

[illegible]

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

[illegible]

Attachment C-4:

FedEx Airbills

FedEx
Tracking
Number

8750 9486 5551

From Please print and press hard.

Date 3/12/12 Sender's FedEx Account Number 402356103

Sender's Name Brittney Kelly Phone 908 1565-2005

Company Weston Solutions Inc.

Address 1090 King George's Post Rd Suite #201

City Edison State NJ ZIP 08870

Your Internal Billing Reference 20401.131.024.5221

To Recipient's Name Kate Aguilera Phone 805 526-7161

Company Columbia Analytical Services

Address 7655 Park Center Drive, Suite A

Address Use this line for the HOLD location address or for confirmation of your shipping address.

City Simi Valley State CA ZIP 93065

Learn to pack like a pro at fedex.com/packaging
Or let our pros pack for you with FedEx OfficeSM Pack & Ship.

Form ID No. 0200

Sender's Copy

4a Express Package Service

*To most locations.

Packages up to 150 lbs.

- ☒ FedEx Priority Overnight
Next business morning.¹ Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx Standard Overnight
Next business afternoon.² Saturday Delivery NOT available.
- ☐ FedEx First Overnight
Earliest next business morning delivery to select locations.³
- ☐ FedEx 2Day
Second business day.⁴ Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx Express Saver
Third business day.⁵ Saturday Delivery NOT available.

4b Express Freight Service

**To most locations.

Packages over 150 lbs.

- ☐ FedEx 1Day Freight
Next business day.⁶ Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx 2Day Freight
Second business day.⁷ Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx 3Day Freight
Third business day.⁸ Saturday Delivery NOT available.

5 Packaging

*Declared value limit \$500.

- ☐ FedEx Envelope⁹
- ☐ FedEx Pak¹⁰
Includes FedEx Small Pak and FedEx Large Pak.
- ☐ FedEx Box
- ☐ FedEx Tube
- ☒ Other

6 Special Handling and Delivery Signature Options

- ☐ SATURDAY Delivery
NOT available for FedEx Standard Overnight, FedEx Express Saver, or FedEx 3Day Freight.

- ☒ No Signature Required
Packages may be left without obtaining a signature for delivery.
- ☐ Direct Signature
Signatures of recipient's address only sign for delivery. Fee applies.
- ☐ Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

- ☒ No
- ☐ Yes
As per attached Shipper's Declaration.
- ☐ Yes
Shipper's Declaration not required.
- ☐ Dry Ice
Dry Ice, 6 UN 1845
- ☐ Cargo Aircraft Only

7 Payment Bill to:

- Enter FedEx Acct. No. or Credit Card No. below.
- ☐ Sender Acct. No. in Section 1a bill to:
- ☐ Recipient
- ☒ Third Party
- ☐ Credit Card
- ☐ Cash/Check
- FedEx Acct. No. 402356103 Exp. Date

Total Packages 1

Total Weight 11.102 lbs.

Total Declared Value¹¹ \$ 00

Your liability is limited to \$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

606

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RETAIN THIS COPY FOR YOUR RECORDS.

FedEx Tracking Number 8640 4833 1689

1 Please print and press hard.
Date 3/14/12 Sender's FedEx Account Number 402356103 NUMBER ONLY

Sender's Name Britney Kelly Phone ()
Company Weston Solutions Inc
Address 1090 King Georges Post Rd Suite 201
City Edison State NJ ZIP 08901

2 Your Internal Billing Reference
First 24 characters will appear on invoice. 20401.151.024.5221

3 To Recipient's Name Kate Aguilera Phone (805) 526-7161

Company Columbia Analytical Services

Recipient's Address 2655 Park Center Drive Suite A
We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address
To request a package be held at a specific FedEx location, print FedEx address here.
City Simi Valley State CA ZIP 93065

 **Store your addresses at fedex.com**
Simplify your shipping. Manage your account. Access all the tools you need.

4a Express Package Service
☒ FedEx Priority Overnight Next business morning*
☐ FedEx Standard Overnight Next business afternoon*
☐ FedEx 2Day Second business day*
☐ FedEx Express Saver Third business day*
☐ FedEx First Overnight Next business morning delivery to select locations.
*To most locations.

4b Express Freight Service
☐ FedEx 1Day Freight* Next business day*
☐ FedEx 2Day Freight Second business day*
☐ FedEx 3Day Freight Third business day*
*Call for Confirmation. **To most locations.

5 Packaging
☐ FedEx Envelope*
☐ FedEx Pak* Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.
☐ FedEx Box
☐ FedEx Tube
☒ Other
*Declared value limit \$500.

6 Special Handling
☐ SATURDAY Delivery NOT Available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx Sturdy Freight.
☐ HOLD Weekday at FedEx Location NOT Available for FedEx First Overnight.
☐ HOLD Saturday at FedEx Location Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.
Does this shipment contain dangerous goods?
☒ No One box must be checked.
☐ Yes As per attached Shipper's Declaration and required.
☐ Dry Ice Dry Ice, 9 UN 1845
☐ Cargo Aircraft Only

7 Payment Bill to:
☐ Sender Sender's Account No. in Section 1 will be billed.
☐ Recipient
☒ Third Party
☐ Credit Card
☐ Cash/Check
FedEx Acct. No. 402356103 Exp. Date

Total Packages Total Weight Total Declared Value*
\$.00
*Our liability is limited to \$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and to the current FedEx Service Guide, including terms that limit our liability.

8 Residential Delivery Signature Options If you require a signature, check Direct or Indirect.
☐ No Signature Required Packages may be left without obtaining a signature for delivery.
☐ Direct Signature Someone at recipient's address may sign for delivery. Fee applies.
☐ Indirect Signature If no one is available at recipient's address, someone at a neighboring address may sign for delivery. Fee applies.
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Rev. Date 10/09-Part 1/12/2011-©1994-2008 FedEx-PRINTED IN U.S.A. SBY

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FedEx Tracking Number

8750 9486 5768

Form 101 0200

Senders Copy

From Please print and press hard.
Date 3/15/12 Sender's FedEx Account Number 402356103
Brittney Kelly Phone 908,565-2975
Company Weston Solutions Inc
Address 1090 King Georges Post Rd Suite 201
City Edison State NJ ZIP 08901
Your Internal Billing Reference 20401.131.024.5221
To Recipient's Name Kale Aguilera Phone 805,526-7161
Company Columbia Analytical Services
Address 2655 Park Center Drive
Suite A
City Simi Valley State CA ZIP 93065

HOLD Weekday
FedEx location address
REQUIRED. NOT available for
FedEx First Overnight.
HOLD Saturday
FedEx location address
REQUIRED. Available ONLY for
FedEx Priority Overnight and
FedEx 2Day to select locations.

Ship and track packages at fedex.com
Simplify your shipping. Manage your account. Access all the tools you need.

4a Express Package Service
FedEx Priority Overnight
FedEx 2Day
FedEx Standard Overnight
FedEx Express Saver
FedEx First Overnight
FedEx 3Day Freight
FedEx 1Day Freight
FedEx 2Day Freight
FedEx 3Day Freight
5 Packaging
FedEx Envelope
FedEx Pak
FedEx Box
FedEx Tube
Other
6 Special Handling and Delivery Signature Options
SATURDAY Delivery
No Signature Required
Direct Signature
Indirect Signature
Does this shipment contain dangerous goods?
7 Payment Bill to
Sender
Recipient
Third Party
Credit Card
Cash/Check
Total Packages
Total Weight
Total Declared Value

FedEx US Airbill

FedEx
Tracking
Number

8640 4833 1690

Sender's Copy

1 From Please print and press hard.
 Date 3/19/12 Sender's FedEx Account Number 402356103
 Sender's Name Brittney Kelly Phone 1908 1565-2975
 Company Western Solutions Inc
 Address 1090 King Georges Post Rd
 City Edison State NJ ZIP 08901

2 Your Internal Billing Reference 20401.131.0245221

3 To
 Recipient's Name Kate Aguilera Phone 18051526-7161
 Company Columbia Analytical Services
 Recipient's Address 2655 Park Center Drive Suite A
 We cannot deliver to P.O. boxes or P.O. ZIP codes.
 Address
 To request a package be held at a specific FedEx location, print FedEx address here.
 City Simi Valley State CA ZIP 93065



Schedule a pickup at fedex.com
 Simplify your shipping. Manage your account. Access all the tools you need.

4a Express Package Service
☒ FedEx Priority Overnight
☐ FedEx Standard Overnight
☐ FedEx First Overnight
☐ FedEx 2Day
☐ FedEx Express Saver
☐ FedEx 1Day Freight
☐ FedEx 2Day Freight
☐ FedEx 3Day Freight

4b Express Freight Service
☐ FedEx 1Day Freight
☐ FedEx 2Day Freight
☐ FedEx 3Day Freight

5 Packaging
☐ FedEx Envelope
☐ FedEx Pak
☐ FedEx Box
☒ Other

6 Special Handling
☐ SATURDAY Delivery
☐ HOLD Weekday at FedEx Location
☐ HOLD Saturday at FedEx Location
☒ No
☐ Yes
☐ Dry Ice
☐ Cargo Aircraft Only

7 Payment Bill to:
☐ Sender
☐ Recipient
☒ Third Party
☐ Credit Card
☐ Cash/Check

FedEx Acct. No. 402356103
 Total Packages 1 Total Weight 1.00 Total Declared Value* \$.00

8 Residential Delivery Signature Options
☒ No Signature Required
☐ Direct Signature
☐ Indirect Signature

520

Rev. Date 10/06-Part #158281-©1994-2006 FedEx-PRINTED IN U.S.A. SRY



FedEx Tracking Number 8640 4833 1704

From Please print and press hard.
Date 3/22/12 Sender's FedEx Account Number 402356103

Sender's Name Brittney Kelly Phone (908) 565 2975

Company Weston Solutions Inc

Address 1090 King Georges Post Rd

City Edison State NJ ZIP 08401

2 Your Internal Billing Reference 20401.131.024.522

3 To Recipient's Name Kate Aguilera Phone (805) 526-7161

Company Columbia Analytical Services

Recipient's Address 2655 Park Center Drive Suite A

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address To request a package be held at a specific FedEx location, print FedEx address here.

City Simi Valley State CA ZIP 93065

4a Express Package Service
☒ FedEx Priority Overnight
Next business morning. * Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx Standard Overnight
Next business afternoon. * Saturday Delivery NOT available.
☐ FedEx First Overnight
Fastest next business morning delivery to select locations. * Saturday Delivery NOT available.
☐ FedEx 2Day
Second business day. * Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx Express Saver
Third business day. * Saturday Delivery NOT available.
* To meet locations.4b Express Freight Service
☐ FedEx 1Day Freight
Next business day. * Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx 2Day Freight
Second business day. * Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx 3Day Freight
Third business day. * Saturday Delivery NOT available.
* To meet locations.5 Packaging
☐ FedEx Envelope
☐ FedEx Pak
Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.
☐ FedEx Box
☐ FedEx Tube
☒ Other
* Declared value limit \$500.6 Special Handling
☐ SATURDAY Delivery
NOT Available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 2Day Freight.
☐ HOLD Weekday at FedEx Location
NOT Available for FedEx First Overnight and FedEx 2Day to select locations.
☐ HOLD Saturday at FedEx Location
Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.
Does this shipment contain dangerous goods?
One box must be checked.
☒ No
☐ Yes
As per attached Shipper's Declaration.
☐ Yes
Shipper's Declaration not required.
☐ Dry Ice
Dry Ice & IATA 6025
Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.
☐ Cargo Aircraft Only7 Payment Bill to
Enter FedEx Acct. No. or Credit Card No. below.
☐ Sender Acct. No. in Section 7a to be used.
☐ Recipient
☒ Third Party
☐ Credit Card
☐ Cash/Check
FedEx Acct. No. 402356103
Exp. DateTotal Packages 1
Total Weight 7.15
Total Declared Value \$ 0.00
* Our liability is limited to \$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.8 Residential Delivery Signature Options
If you require a signature, check Direct or Indirect.
☒ No Signature Required
Package may be left without obtaining a signature for delivery.
☐ Direct Signature
Someone at recipient's address may sign for delivery. Fee applies.
☐ Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. Fee applies.
520

Rev. Date 10/09 Part #15023-01/09-300 FedEx-PRINTED IN U.S.A. 507

REMAIN INSIDE UNTIL YOU RECEIVE YOUR RECORDS.



FedEx Tracking Number 8578 5254 5102

From Please print and press hard.
3/23/12 Sender's FedEx Account Number 402356103
Sender's Name Bri Hney Kelly Phone (908) 914-5716
Company Weston Solutions Inc
Address 1090 King Georges Post Rd
City Edison State NJ ZIP 08901
2 Your Internal Billing Reference 20401.131.024.5221
3 To
Recipient's Name Kate Aguilera Phone (805) 526-7161
Company Columbia Analytical Services
Recipient's Address 2655 Park Center Drive Suite A
We cannot deliver to P.O. boxes or P.O. ZIP codes.
Address
To request a package be held at a specific FedEx location, print FedEx address here.
City Simi Valley State CA ZIP 93065



Find drop-off locations at fedex.com
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4a Express Package Service
☒ FedEx Priority Overnight
Next business morning* Friday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.
☐ FedEx Standard Overnight
Next business afternoon*
Saturday Delivery NOT available.
☐ FedEx First Overnight
Earliest next business morning
delivery to select locations.
Saturday Delivery NOT available.
☐ FedEx 2Day
Second business day* Thursday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.
FedEx Envelope rate not available. Minimum charge One pound rate.
☐ FedEx Express Saver
Third business day* Thursday
Saturday Delivery NOT available.
*To meet business

4b Express Freight Service
☐ FedEx 1Day Freight*
Next business day* Friday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.
☐ FedEx 2Day Freight
Second business day* Thursday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.
☐ FedEx 3Day Freight
Third business day* Thursday
Saturday Delivery NOT available.
*To meet business

5 Packaging
☐ FedEx Envelope*
☐ FedEx Pak*
Includes FedEx Small Pak,
FedEx Large Pak, and FedEx Sturdy Pak.
☐ FedEx Box
☐ FedEx Tube
☒ Other
*Declared value limit \$500

6 Special Handling
Include FedEx address in Section 3
☒ SATURDAY Delivery
NOT Available for
FedEx Standard Overnight,
FedEx First Overnight, FedEx Express
Saver, or FedEx 2Day Freight.
☐ HOLD Weekday
at FedEx Location
NOT Available for
FedEx Priority Overnight.
☐ HOLD Saturday
at FedEx Location
Available ONLY for
FedEx Priority Overnight and
FedEx 2Day to select locations.
Does this shipment contain dangerous goods?
☒ No
☐ Yes
Dry Ice must be checked.
☐ Yes
Dry Ice must be checked.
Shipper's Declaration
not required.
☐ Dry Ice
Dry Ice & UN 1845
☐ Cargo Aircraft Only
Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

7 Payment: Bill to:
Enter FedEx Acct. No. or Credit Card No. below.
☐ Sender
Acct. No. in
Section 1 will
be billed.
☐ Recipient
☒ Third Party
☐ Credit Card
☐ Cash/Check
FedEx Acct. No.
Credit Card No.
Exp.
Date
Total Packages
Total Weight
Total Declared Value*
\$.00
*Our liability is limited to \$100 unless you declare a higher value. See back for details. By using this bill you agree to the
service conditions on the back of this bill and in the current FedEx Service Guide, including terms that limit our liability. FedEx Use Only

8 NEW Residential Delivery Signature Options If you require a signature, check Direct or Indirect.
☒ No Signature
Required
Packages may be left with-
out obtaining a signature
for delivery.
☐ Direct Signature
Anyone at recipient's
address may sign for delivery.
For application.
☐ Indirect Signature
If no one is available at
recipient's address, anyone
at a neighboring address may
sign for delivery. For application.
520
Rev. Date 8/05-Part #192081-011994-2005 FedEx-PRINTED ON U.S.A. SKY

FedEx US Airbill
Express

FedEx Tracking Number 8578 5254 5113

From **3/26/12** Sender's FedEx Account Number **402356103**

Sender's Name **Brittney Kelly** Phone **(908) 565-2975**

Company **Weston Solutions Inc**

Address **1090 King Georges Post Rd**

City **Edison** State **NJ** ZIP **08901**

Your Internal Billing Reference **20401.131.024.552**

To Recipient's Name **Kate Aguilera** Phone **(805) 526-7161**

Company **Columbia Analytical Services**

Recipient's Address **2655 Park Center Drive Suite A**

Address

City **Simi Valley** State **CA** ZIP **93065**

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Simplify your shipping. Manage your account. Access all the tools you need.

Sender's Copy

4a Express Package Service Packages up to 150 lbs.

☒ **FedEx Priority Overnight** Next business morning. * Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ **FedEx Standard Overnight** Next business afternoon. * Saturday Delivery NOT available.
☐ **FedEx First Overnight** Earliest next business morning delivery to select locations. * Saturday Delivery NOT available.

☐ **FedEx 2Day** Second business day. * Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected. * FedEx Envelope rate not available. Minimum charge: One-pound rate.
☐ **FedEx Express Saver** Third business day. * Saturday Delivery NOT available. * To most locations.

4b Express Freight Service Packages over 150 lbs.

☐ **FedEx 1Day Freight** Next business day. * Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ **FedEx 2Day Freight** Second business day. * Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ **FedEx 3Day Freight** Third business day. * Saturday Delivery NOT available. * To most locations.

5 Packaging

☐ **FedEx Envelope** * ☐ **FedEx Pak** * Includes FedEx Small Pak, FedEx Large Pak, and FedEx Study Pak. ☐ **FedEx Box** ☒ **FedEx Tube** * Declared value limit \$500. ☒ **Other**

6 Special Handling Includes FedEx reference in Section 3.

☐ **SATURDAY Delivery** NOT Available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 2Day Freight.
☐ **HOLD Wednesday at FedEx Location** NOT Available for FedEx First Overnight.
☐ **HOLD Saturday at FedEx Location** Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods?
☒ **No** One box must be checked.
☐ **Yes** As per attached Shipper's Declaration. ☐ **Yes** Shipper's Declaration not required. ☐ **Dry Ice** Dry Ice, 1 UN 1845. ☐ **Cargo Aircraft Only**

7 Payment: Bill to Enter FedEx Acct. No. or Credit Card No. below.

☐ **Sender** Acct. No. in Section 1 will be billed. ☐ **Recipient** ☒ **Third Party** ☐ **Credit Card** ☐ **Cash/Check**

FedEx Acct. No. **402356103** Exp. Date

Total Packages Total Weight Total Declared Value \$.00

Your liability is limited to \$200 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and to the current FedEx Service Guide, including terms that limit our liability.

8 NEW Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

☒ **No Signature Required** Packages may be left without obtaining a signature for delivery.
☐ **Direct Signature** Anyone at recipient's address may sign for delivery. Fee applies.
☐ **Indirect Signature** If no one is available at recipient's address, anyone at a neighboring address may sign for delivery. Fee applies.

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Rev. Date 8/02-Part 7/12/2011 ©1994-2005 FedEx-PRINTED IN U.S.A. 571

RETAIN THIS COPY FOR YOUR RECORDS.

1 From Please print and press hard.

Date 3/27/12 Sender's FedEx Account Number 402356103 UNIT NUMBER ONLY

Sender's Name Brittney Kelly Phone 908, 565-2975

Company Weston Solutions

Address 1090 King Georges Post Rd

City Edison State NJ ZIP 08901

2 Your Internal Billing Reference

20401.131.024.5221

3 To Recipient's Name Kate Aguilera Phone 805, 526-7161

Company Columbia Analytical Services

Address 2655 Park Center Drive Suite A

City Simi Valley State CA ZIP 93065

HOLD Weekday
FedEx location address required. NOT available for FedEx First Overnight.

HOLD Saturday
FedEx location address required. FedEx Priority Overnight and FedEx 2Day to select locations.

Senders Copy

4a Express Package Service

☒ **FedEx Priority Overnight** Next business morning. * Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ **FedEx Standard Overnight** Next business afternoon. * Saturday Delivery NOT available.
☐ **FedEx First Overnight** Earliest next business morning delivery to select locations.
☐ **FedEx 2Day** Second business day. * Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ **FedEx Express Saver** Third business day. * Saturday Delivery NOT available.

4b Express Freight Service

☐ **FedEx 1Day Freight** Second business day. * Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ **FedEx 2Day Freight** Second business day. * Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ **FedEx 3Day Freight** Third business day. * Saturday Delivery NOT available.

5 Packaging

☐ **FedEx Envelope** * Declared value limit \$500.
☐ **FedEx Pak** Includes FedEx Small Pak and FedEx Large Pak.
☐ **FedEx Box**
☐ **FedEx Tube**
☒ **Other**

6 Special Handling and Delivery Signature Options

☐ **SATURDAY Delivery** NOT available for FedEx Standard Overnight, FedEx Express Saver, or FedEx 2Day Freight.
☐ **No Signature Required** Packages may be left without obtaining a signature for delivery.
☐ **Direct Signature** Someone at recipient's address may sign for delivery. * Fee applies.
☐ **Indirect Signature** If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. * Fee applies.

Does this shipment contain dangerous goods?

☒ **No** One box must be checked.
☐ **Yes** As per attached Shipper's Declaration.
☐ **Yes** Shipper's Declaration not required.
☐ **Dry Ice** Dry Ice, 5, UN 1845
☐ **Cargo Aircraft Only**

7 Payment Bill to:

Sender's Account No. in Section 1 will be billed. ☐ **Recipient** ☒ **Third Party** ☐ **Credit Card** ☐ **Cash/Check**
FedEx Account No. 402356103 Exp. Date _____
Total Packages _____ Total Weight _____ Total Declared Value* _____

*Our liability is limited to \$500 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

606

Try FedEx® QuickShip at fedex.com
Access the shipping tools you need directly from Microsoft® Office Outlook®

From Please print and press hard.

Date 3/28/12 Sender's FedEx Account Number 402356103 SEE BACK FOR ADDITIONAL INFORMATION

Recipient's Name Brittney Kelly Phone (908) 565-2925

Company Weston Solutions Inc.

Address 1040 King Georges Post Road

City Edison State NJ ZIP 08901

Your Internal Billing Reference 20401.131.024.5221

To Recipient's Name Kate Aguilera Phone (805) 526-7161

Company Columbia Analytical Services

Address 2655 Park Center Drive

We cannot deliver to P.O. boxes or F.D. ZIP codes.

Address Suite A

City Simi Valley State CA ZIP 93065

HOLD Weekday
FedEx business days
REQUIRED. NOT available for
FedEx First Overnight.

HOLD Saturday
FedEx business days
REQUIRED. Available only for
FedEx Priority Overnight and
FedEx 2Day to select locations.



Ship on the go at mobile.fedex.com
Tap into all our FedEx® shipping tools with FedEx® Mobile

4a Express Package Service

- ☒ **FedEx Priority Overnight**
Next business morning.® Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ **FedEx Standard Overnight**
Next business afternoon.® Saturday Delivery NOT available.
- ☐ **FedEx First Overnight**
Earliest next business morning delivery to select locations.
- ☐ **FedEx 2Day**
Second business day.® Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ **FedEx Express Saver**
Third business day.® Saturday Delivery NOT available.

4b Express Freight Service

- ☐ **FedEx 1Day Freight**
Next business day.® Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ **FedEx 2Day Freight**
Second business day.® Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ **FedEx 3Day Freight**
Third business day.® Saturday Delivery NOT available.

5 Packaging

- ☐ **FedEx Envelope**® ☐ **FedEx Pak**®
Includes FedEx Small Pak and FedEx Large Pak.
- ☐ **FedEx Box** ☐ **FedEx Tube** ☒ **Other**

6 Special Handling and Delivery Signature Options

- ☐ **SATURDAY Delivery**
NOT available for FedEx Standard Overnight, FedEx Express Saver, or FedEx 2Day Freight.
- ☐ **No Signature Required**
Package may be left without obtaining a signature for delivery.
- ☐ **Direct Signature**
Someone at recipient's address may sign for delivery. FedEx requires.
- ☐ **Indirect Signature**
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. FedEx requires.

Does this shipment contain dangerous goods?

- ☒ **No** ☐ **Yes**
As per attached Shipper's Declaration.
- ☐ **Yes**
Shipper's Declaration not required.
- ☐ **Dry Ice**
Dry ice, 9 UN 1845 x kg.
- ☐ **Cargo Aircraft Only**

7 Payment Bill to:

- ☐ **Sender**
Enter FedEx Acct. No. or Credit Card No. below.
- ☐ **Recipient** ☒ **Third Party** ☐ **Credit Card** ☐ **Cash/Check**
- FedEx Acct. No. 402356103
Credit Card No.

Total Packages _____ Total Weight _____ Total Declared Value® _____

*Our liability is limited to \$500 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

1 From Please print and press hard.

Date 3/29/12 Sender's FedEx Account Number 402356103 SHIP TO BUSINESS NUMBER ONLY
Brittney Kelly Phone 908, 565-2975
 Company Weston Solutions

Address 1090 King Georges Post Rd Dept./Floor/Suite/Room
 City Edison State NJ ZIP 08901

2 Your Internal Billing Reference

First 24 characters will appear on invoice. 20401.131.024.5221

To Recipient's Name Kate Aguilera Phone 805, 526-7161

Company Columbia Analytical Services

Address 2655 Park Center Drive Suite A Use this line for the HOLD location address or for confirmation of your shipping address.
 We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

City Simi Valley State CA ZIP 93065

 **Learn to pack like a pro at fedex.com/packaging**
 Or let our pros pack for you with FedEx Office® Pack & Ship

4a Express Package Service

☒ **FedEx Priority Overnight** Next business morning.® Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected. ☐ **FedEx Standard Overnight** Next business afternoon.® Saturday Delivery NOT available. ☐ **FedEx First Overnight** Earliest next business morning delivery to select locations.®
☐ **FedEx 2Day** Second business day.® Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected. ☐ **FedEx Express Saver** Third business day.® Saturday Delivery NOT available.

4b Express Freight Service

☐ **FedEx 1Day Freight** Next business day.® Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected. ☐ **FedEx 2Day Freight** Second business day.® Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected. ☐ **FedEx 3Day Freight** Third business day.® Saturday Delivery NOT available.

5 Packaging

☐ FedEx Envelope® ☐ FedEx Pak® Includes FedEx Small Pak and FedEx Large Pak. ☐ FedEx Box ☐ FedEx Tube ☒ Other

6 Special Handling and Delivery Signature Options

☐ **SATURDAY Delivery** NOT available for FedEx Standard Overnight, FedEx Express Saver, or FedEx 3Day Freight.
☒ **No Signature Required** Package may be left without obtaining a signature for delivery. ☐ **Direct Signature** Someone at recipient's address may sign for delivery. P.S. applies. ☐ **Indirect Signature** If someone is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. P.S. applies.

Does this shipment contain dangerous goods?

☒ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry Ice, 9, UN 1845 ☐ Cargo Aircraft Only

7 Payment Bill to:

Sender's Acct. No. in Section 1 will be billed. ☐ Recipient ☒ Third Party ☐ Credit Card ☐ Cash/Check
 FedEx Acct. No. 402356103 Exp. Date
 Total Packages Total Weight Total Declared Value

*Our liability is limited to \$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

From Please print and press hard.

Date 3/30/12 Sender's FedEx Account Number 402356103 NUMBER ONLY

Brittney Kelly Phone 908, 565-2925

Company Weston Solutions Inc

Address 1090 King Georges Post Rd

City Edison State NJ ZIP 08901

Your Internal Billing Reference

First 21 characters will appear on invoice. 20401.131024.5221

To Recipient's Name Kak Aguilera Phone 805.526-7161

Company Columbia Analytical Services

Address 2655 Park Center Dr. Suite A

We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

Address Use this line for the HOLD location address or for continuation of your shipping address.

City Simi Valley State CA ZIP 93065

HOLD Weekday
FedEx location address
REQUIRED. NOT available for
FedEx First Overnight.

HOLD Saturday
FedEx location address
REQUIRED. Available only for
FedEx Priority Overnight and
FedEx 2Day to select locations.

4a Express Package Service

- ☒ **FedEx Priority Overnight** Next business morning. * Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ **FedEx Standard Overnight** Next business afternoon. * Saturday Delivery NOT available.
- ☐ **FedEx First Overnight** Earliest next business morning delivery to select locations.
- ☐ **FedEx 2Day** Second business day. * Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ **FedEx Express Saver** Third business day. * Saturday Delivery NOT available.

4b Express Freight Service

- ☐ **FedEx 1Day Freight** Next business day. * Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ **FedEx 2Day Freight** Second business day. * Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ **FedEx 3Day Freight** Third business day. * Saturday Delivery NOT available.

5 Packaging

- ☐ **FedEx Envelope** * Restricted to 10 lbs.
- ☐ **FedEx Pak** Includes FedEx Small Pak and FedEx Large Pak.
- ☐ **FedEx Box**
- ☐ **FedEx Tube**
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- Does this shipment contain dangerous goods?
One box must be checked.
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- ☐ **Dry Ice** Dry Ice, 6 UN 1845
- ☐ **Cargo Aircraft Only**

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- ☐ **Sender** Account No. in Section 7a bill to sender.
- ☐ **Recipient**
- ☒ **Third Party** Enter FedEx Acct. No. or Credit Card No. below.
- ☐ **Credit Card**
- ☐ **Cash/Check**
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Company Weston Solutions Inc

Address 1090 King Georges Post Rd

City Edison State NJ ZIP 08901

2 Your Internal Billing Reference

First 34 characters will appear on invoice. 20401.131.024.5221

3 To

Recipient's Name Kate Aguilera Phone 805, 526-7161

Company Columbia Analytical Services

Address 2655 Park Center Drive Suite A
We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address Simi Valley State CA ZIP 93065
Use this line for the HOLD location address or for confirmation of your shipping address.

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☐ **FedEx First Overnight** Earliest next business morning delivery to select locations.
☐ **FedEx 2Day** Second business day. Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ **FedEx Express Saver** Third business day. Saturday Delivery NOT available.

4b Express Freight Service

☐ **FedEx 1Day Freight** Next business day. Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ **FedEx 2Day Freight** Second business day. Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ **FedEx 3Day Freight** Third business day. Saturday Delivery NOT available.

5 Packaging

☐ FedEx Envelopes ☐ FedEx Pak® ☐ FedEx Box ☐ FedEx Tube ☒ Other

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☐ **Direct Signature** Someone at recipient's address may sign for delivery. PCV applies.
☐ **Indirect Signature** If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. PCV applies.
 Does this shipment contain dangerous goods?
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7 Payment Bill to:

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 Total Packages _____ Total Weight _____ Total Declared Value \$ _____

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Sender's FedEx Account Number

402356103

Date 4/10/12

Brittney Kelly

Phone 908.565-2925

Company Weston Solutions Inc

Address 1040 King George Post Rd

City Edison

State NJ

ZIP 08901

2 Your Internal Billing Reference

First 34 characters will appear on invoice.

OPTIONAL

To Recipient's Name Kate Aguilera

Phone 805.526-7161

Company Columbia Analytical Services

Address 2655 Park Center Dr. Suite A

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Rm

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State CA

ZIP 93065



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☐ FedEx First Overnight

☐ FedEx 2Day

☐ FedEx Express Saver

4b Express Freight Service

**To most locations

Packages over 150 lbs.

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☐ FedEx 1Day Freight

☐ FedEx 2Day Freight

☐ FedEx 3Day Freight

5 Packaging

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☐ FedEx Envelope*

☐ FedEx Pak*

☐ FedEx Box

☐ FedEx Tube

☒ Other

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☐ Indirect Signature

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☐ Cargo Aircraft Only

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☐ Sender

☐ Recipient

☒ Third Party

☐ Credit Card

☐ Cash/Check

FedEx Acct. No.

402356103

Exp. Date

Total Packages

Total Weight

Total Declared Value*

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From Please print and press hard.

Date 4/11/12 Sender's FedEx Account Number 402356103 SHIPMENT NUMBER ONLY

Brittney Kelly Phone 908.565-2875

Company Weston Solutions, Inc.

Address 1090 King Georges Post Rd

City Edison State NJ ZIP 08901

Your Internal Billing Reference 20401.131.024.5221

To Recipient's Name Kate Aguilera Phone (805) 526-7161

Company Columbia Analytical Services

Address 2655 Park Center Dr. Suite A

Address Use this line for the HOLD location address or for confirmation of your shipping address.

City Simi Valley State CA ZIP 93065

HOLD Weekday
FedEx location address
REQUIRED. NOT available for
FedEx First Overnight.

HOLD Saturday
FedEx location address
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FedEx Priority Overnight and
FedEx 2Day to select locations.

4a Express Package Service

- ☒ **FedEx Priority Overnight**
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- ☐ **FedEx Standard Overnight**
Next business afternoon. Saturday Delivery NOT available.
- ☐ **FedEx First Overnight**
Earliest next business morning delivery to select locations.
- ☐ **FedEx 2Day**
Second business day. Thursday shipments will be delivered on Friday unless SATURDAY Delivery is selected.
- ☐ **FedEx Express Saver**
Third business day. Saturday Delivery NOT available.

4b Express Freight Service

- ☐ **FedEx 1Day Freight**
Next business day. Friday shipments will be delivered on Saturday unless SATURDAY Delivery is selected.
- ☐ **FedEx 2Day Freight**
Second business day. Thursday shipments will be delivered on Friday unless SATURDAY Delivery is selected.
- ☐ **FedEx 3Day Freight**
Third business day. Saturday Delivery NOT available.

5 Packaging

- ☐ **FedEx Envelope** ☐ **FedEx Pak** ☐ **FedEx Box** ☐ **FedEx Tube** ☒ **Other**

6 Special Handling and Delivery Signature Options

- ☐ **SATURDAY Delivery**
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- ☒ **No Signature Required**
Packages may be left without obtaining a signature for delivery.
- ☐ **Direct Signature**
Signature at recipient's address may sign for delivery. *FCR applies.*
- ☐ **Indirect Signature**
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. *For residential deliveries only. FCR applies.*

Does this shipment contain dangerous goods?

- ☒ **No** ☐ **Yes** ☐ **Yes** ☐ **Dry Ice** ☐ **Cargo Aircraft Only**

7 Payment Bill to:

- ☐ **Sender** ☐ **Recipient** ☒ **Third Party** ☐ **Credit Card** ☐ **Cash/Check**
- FedEx Acct. No. 402356103 Exp. Date _____

Total Packages _____ Total Weight _____ Total Declared Value _____

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Date 4/12/13 Sender's FedEx Account Number 402356103 SET YOUR OWN ACCOUNT NUMBER ONLY

Sender's Name Brittney Kelly Phone ()

Company Weston Solutions Inc

Address 1090 King Georges Post Rd Dept./Floor/Suite/Room

City Edison State NJ ZIP 08401

2 Your Internal Billing Reference First 24 characters will appear on invoice. 20401.151000245221

3 To

Recipient's Name Kate Aguilera Phone (805) 526-7161

Company Columbia Analytical Services

Address 2655 Park Center Dr. Suite A HOLD Weekday
We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room
HOLD Saturday
Use this line for the HOLD location address or for continuation of your shipping address.

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☐ FedEx 2Day Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected. ☐ FedEx Express Saver Third business day.* Saturday Delivery NOT available.

4b Express Freight Service ** To select locations. Packages over 150 lbs. CALL 1.800.332.0807

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☐ FedEx 2Day Freight Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected. ☐ FedEx 3Day Freight Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit \$500.

☐ FedEx Envelope* ☐ FedEx Pak* Includes FedEx Small Pak and FedEx Large Pak. ☐ FedEx Box ☐ FedEx Tube ☒ Other

6 Special Handling and Delivery Signature Options

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☒ No Signature Required Package may be left without obtaining a signature for delivery. ☐ Direct Signature Someone at recipient's address may sign for delivery. Fee applies. ☐ Indirect Signature If no one is available at recipient's address, someone at a neighboring address may sign for delivery. Fee residential deliveries only. Fee applies.

Does this shipment contain dangerous goods? One box must be checked.

☒ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry Ice, 9, UN 1845 x kg

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FedEx Acct. No. 402356103 Exp. Date

Total Packages Total Weight Total Declared Value*

lbs. \$.00

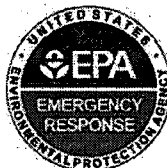
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Attachment C-5:

Laboratory Validated Data Packets

Attachment D

**U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Mansfield Trail Dump Site - Removal Polrep
Initial Removal Polrep**



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II**

Subject: POLREP #1
Initial
Mansfield Trail Dump Site
38
Stanhope, NJ
Latitude: 40.9289443 Longitude: -74.6995999

To: Judith Enck, USEPA Region 2 - RA
Lisa Plevin, USEPA Region 2 -
Joe Rotola, USEPA Region 2, ERRD-RAB
Dan Harkay, USEPA Region 2 ERRD-RAB
Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB
Pat Seppi, U.S. EPA Region 2
George Zachos, USEPA Region 2
Bob McKnight, USEPA Region 2 ERRD-NJB
Mark Herzberg, NJDEP
Beckett Grealish, USEPA Region 2 ERRD-RAB
Fred Mumford, NJDEP - BEMSA

From: Louis DiGuardia, On-Scene Coordinator

Date: 11/30/2011

Reporting Period: 10/20/2011 - 11/30/2011

1. Introduction

1.1 Background

Site Number:	38	Contract Number:	EP-S2-10-03
D.O. Number:	0042	Action Memo Date:	9/29/2011
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	NPL	Operable Unit:	01
Mobilization Date:	1/31/2012	Start Date:	10/20/2011
Demob Date:		Completion Date:	
CERCLIS ID:	NJN000206345	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically

trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byram Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The New Jersey Department of Environmental Protection (NJDEP) submitted a request to the EPA, Emergency and Remedial Response Division on October 16, 2009, to evaluate the Mansfield Trail Dump Site for a removal action under CERCLA.

The Site is bound to the north, south, and west by upland woods, and by a former rail line to the east. The area around the Site is primarily residential. The nearest residences are located approximately 400 feet north and west of the Site. An estimated 384 people reside within 0.5 miles of the Site and 3,321 within one mile. The closest schools are located approximately 2,000 feet to the northwest and south. A bus depot is located approximately 300 feet east of the Site on the opposite side of the former rail line, which is situated in a ravine at least 50 feet deep. A high-tension power line right-of-way passes through the middle of the Site in a northeast-southwest direction. The area under the power line, which includes some of the waste disposal areas, is cleared of trees through scheduled routine mowing by the power company.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B, C, D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in May 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 – 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches.

This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at <http://epaossc.org/mansfieldtraildump>

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. The original excavated depths of these two trenches ranged from three to five feet. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447 square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

During the period February through May 2010, EPA collected samples at the Site and from residences in the vicinity of the Site. The effort included the collection of soil (including background locations), waste/sludge samples, and ground water samples from the monitoring wells at the Site; potable water samples (including background locations) from residences along Brookwood and Ross Roads; and one potable water sample from the Byram Intermediate School.

Samples collected from the northern end of the lower trench in Dump Area A, at a depth of 5 to 8 inches, detected TCE 170 milligrams per kilogram (mg/kg or ppm); cis-1, 2-dichloroethylene (cis-1, 2-DCE) (81 ppm); 1, 2-DCB (40 ppm); and 1, 4-DCB (17 ppm), as maximum concentrations. Toluene; trans-1, 2-dichloroethylene (trans-1, 2-DCE); PCE; ethylbenzene; xylene; isopropylbenzene; 1, 3-DCB; and 1, 2, 4-trichlorobenzene (1, 2, 4-TCB) were also detected at lower concentrations. Samples collected from Dump Area B at a depth of one foot were found to contain estimated levels of toluene (36 ppm); chlorobenzene (54 ppm); 1, 3-DCB (7.9 ppm); 1, 4-DCB (130 ppm); 1, 2-DCB (850 ppm); and 1, 2, 4-TCB (42 ppm), as maximum concentrations. Cis-1, 2-DCE; 2-butanone; benzene; TCE; PCE; ethylbenzene; xylene; and 1, 1, 2, 2-tetrachloroethane (1, 1, 2, 2-PCA) were also detected at lower concentrations.

Sixteen of the residences sampled during the period February through May 2010 had wells where the NJDEP had installed POETs due to TCE contamination. These results revealed TCE and cis-1,2-DCE concentrations as high as 71 ppb and 78 ppb, respectively, and low levels of 1, 1, 1-TCA; trans-1, 2-DCE; and 1, 1-dichloroethane (1, 1-DCA). The potable well containing the highest levels of TCE is reportedly 285 feet deep. TCE was not detected in samples collected from five residential wells where previous NJDEP sampling had not detected TCE and where POETs are not utilized. Samples collected from the two downgradient monitoring wells east of the ridge identified vinyl chloride (170 ppb); 1, 1-DCA (20 ppb); DCE (190 ppb); TCA (8.7 ppb); TCE (16 ppb); chlorobenzene (29 ppb); isopropylbenzene (9.7 ppb); 1, 4-DCB (7.5 ppb); and 1, 2-DCB (8.5 ppb). The wells are believed to be down-gradient of Dump Areas B and E.

During May and June 2010, EPA collected soil and waste samples throughout the Site using Geoprobe direct-push technology and hand borings. The effort included the collection of nearly 100 samples throughout the various disposal areas of the Site, including within the trenches at varying depths and around them for purposes of horizontal delineation. Most of the samples were considered grab samples

at specific depths; however composite waste samples, consisting of waste and/or a waste/soil mix, were also collected from various depths across all the test borings within each trench. The samples were screened for VOCs using a Toxic Vapor Analyzer photo-ionization detector (PID) and flame-ionization detector (FID). The laboratory analyses included the Target Compound List (TCL), Target Analyte List (TAL), hexavalent chromium, and Resource Conservation and Recovery Act (RCRA) hazardous waste characteristics.

A discussion of the analytical results for the samples collected in May and June 2010 follows for each of the former disposal areas.

In Dump Area A (lower trench), four borings were completed and Geoprobe refusal depths were generally between three and four feet, except for one boring which was advanced eight feet. Samples were generally collected between one and two feet in depth, except for the deeper boring, which had an additional sample collected at approximately six to seven feet in depth. All samples from the four borings did not detect any VOCs, including on the northern end where samples previously detected elevated levels of VOCs at shallow depths.

In Dump Area A (upper trench), four borings were completed and Geoprobe refusal depths were generally between two and three feet, except for one boring which was advanced eight feet. Samples were generally collected between one and two feet in depth, except for the deeper boring, which had an additional sample collected at approximately six and seven feet in depth. VOCs were detected in two of the four borings. The maximum concentrations for TCE (2,900 ppm) and 1, 2-DCE (340 ppm) were detected at an approximate depth of seven to eight feet, with lower concentrations detected at the shallower depth. Low levels of the same VOCs were detected in the other boring at a shallow depth. A composite sample of waste material collected from the upper trench over the eight feet identified the presence of TCE at 3,600 ppm and exceeded the RCRA Toxicity Characteristic Leaching Procedure (TCLP) regulatory level of TCE (500 ppb) with a concentration of 13,000 ppb.

In Dump Area B, three borings were completed and Geoprobe refusal depths were between three and seven feet. Samples were generally collected between one and two feet in depth, except for the deeper boring, which had an additional sample collected at approximately seven feet in depth. Samples collected from one of the borings identified the maximum estimated concentrations for TCE (200 ppm), cis-1, 2-DCE (45 ppm), toluene (37 ppm), 1, 4-DCB (180 ppm), 1, 2-DCB (1,100 ppm), and 1, 2, 4-TCB (29 ppm) between one and two feet in depth. A composite sample of waste material collected from the trench over the seven feet identified that the RCRA TCLP regulatory level of TCE (500 ppb) was approached with a concentration of 450 ppb.

In Dump Area D (Trench 1), seven borings were completed and Geoprobe refusal depths were between 5 and 18 feet. Samples were collected at various depths within the entire trench, up to 15 feet in depth. VOCs were detected in two of the seven borings. Samples collected from one of the borings identified the maximum concentrations for ethyl benzene (100 ppm) and xylene (187 ppm) at a depth of less than one foot. Cis-1, 2-DCE; 1, 1, 1-TCA; TCE; and PCE were detected at lower concentrations (< than 100 ppb per compound) in this same boring at approximately 7 feet. A composite sample of waste material collected from the trench between one and 11 feet estimated the presence of PCBs at 8 ppm.

In Dump Area D (Trench 2), three borings were completed and Geoprobe refusal depths were between 11 and 12.5 feet. Samples were collected at various depths within the entire trench, up to nearly 11 feet in depth. VOCs were detected in two of the three borings. The maximum concentrations detected for cis-1, 2-DCE (62 ppm); TCE (260 ppm); toluene (51 ppm); 1, 4-DCB (250 ppm); and 1, 2-DCB (1,500 ppm) were identified between five and six feet in depth in one of the borings. Lower levels of similar compounds were detected both near the surface and near refusal for this boring and near the surface of an adjoining boring. A composite sample of waste material collected from the trench over the 11.5 feet exceeded the RCRA TCLP regulatory level of TCE (500 ppb), with a concentration of 880 ppb, and identified the presence of PCBs at 1.4 ppm.

In Dump Area D (Trench 3), five borings were completed and Geoprobe refusal depths were between two and six feet. Samples were generally collected within the upper 2.5 feet of the trench. VOCs were detected in three of the five borings. The maximum concentrations detected for cis-1, 2-DCE (42 ppm); TCE (81 ppm); toluene (37 ppm); chlorobenzene (100 ppm); 1, 4-DCB (190 ppm); 1, 2-DCB (1,000 ppm); and 1, 2, 4-TCB (4.8 ppm) were identified within the upper two feet. A composite sample of waste material collected from the trench over the upper four feet identified the presence of TCE at 73 ppm and PCBs at 2 ppm.

In Dump Area D (Trench 4), three borings were completed and Geoprobe refusal depths were between one and three feet. Samples were collected within the upper 1.5 feet. All samples from the three borings did not detect any VOCs.

In Dump Area E, two borings were completed and Geoprobe refusal depths were between 9 and 15 feet. Samples were collected at various depths within this area, up to approximately 12 feet in depth. The maximum concentrations detected for cis-1, 2-DCE (120 ppm); TCE (220 ppm); toluene (310 ppm); chlorobenzene (97 ppm); total xylenes (270 ppm); 1, 4-DCB (3,700 ppm); 1, 2-DCB (4,900 ppm); and 1, 2, 4-TCB (1,800 ppm) were identified within the upper two feet. Elevated levels of VOCs were also identified between six and seven feet and were detected at low concentrations at a depth of 12 feet. A composite sample of waste material collected from this area between 2 and 12 feet identified the presence of TCE at 430 ppm and 1, 2-DCB at 2,500 ppm.

While elevated levels of VOCs have been detected within the former disposal areas, results for the most part were sporadic. The trenches appear to contain intermixed waste, waste/soil, and soil. This may be due to the manner in which the waste was originally placed in the trenches and/or the use of fill material at various times throughout the history of the operations. With the exception of one detection of TCE (39 ppb) in a subsurface sample collected between Dump Area D and the pathway, all other horizontal delineation samples collected at the Site did not detect any VOCs. Horizontal delineation borings were not advanced in Dump Area E.

Field screening of the samples for VOCs during the sampling event in May/June 2010 using a PID and FID revealed elevated levels of VOC vapors in the subsurface throughout the former disposal areas; however, in particular, in Dump Areas D and E. Readings from the near-surface samples in Dump Area D exceeded 1,000 units above background for both the PID and FID in two of the trenches. Readings from the near-surface samples in Dump Area E approached 3,000 units above background for the FID and exceeded 200 units above background for the PID.

A groundwater sample collected from a shallow, temporary well point installed in Dump Area E, the only location where sufficient groundwater was detected, identified: toluene (380 ppb); chlorobenzene (120 ppb); 1, 4-DCB (410 ppb); and 1, 2-DCB (2,100 ppb). The temporary well point, while only representing screening data and obviously not a source of drinking water, does provide an indication of the significance of the impact that the former waste disposal areas have had to the shallow aquifer at the Site. The concentrations in the temporary well are higher than the Office of Solid Waste and Emergency Response (OSWER) generic RAL for drinking water for 1, 4-DCB (43 ppb) and the federal MCLs for chlorobenzene (100 ppb) and 1, 2-DCB (600 ppb). The monitoring wells at the Site, which represent bedrock flow and are not a source of drinking water, also provide an indication of the impact to groundwater. The concentrations in one of the monitoring wells have exceeded the RAL for vinyl chloride (2 ppb) and the federal MCLs for cis-1,2-DCE (70 ppb) and TCE (5 ppb).

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

EPA is currently working with two property owners, New Jersey Department of Transportation/New Jersey Transit (NJDOT) for road access, and Public Service Electric & Gas (PSE&G) to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. EPA has activated the Emergency Removal and Response Services contractor, Environmental Restoration, LLC, to work on the development of site plans and to provide support to obtain access agreements for site entry. EPA met with ER representatives at the Mansfield Trail Dump Site on October 20, 2011, to initiate the development of plans for access to the NJDOT, and to support obtaining access from the New Jersey Transit and private parties.

2.1.2 Response Actions to Date

EPA OSC is working with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Contaminated soil	soil				

2.2 Planning Section

2.2.1 Anticipated Activities

EPA has scheduled for December 8, 2012, a Public Availability Session and Public Meeting for the removal activities and to provide an update on remedial activities. EPA has begun the preparation of an Administrative Record for the Removal Action.

2.2.1.1 Planned Response Activities

Once access agreements have been completed by all parties, and site plans have been completed (i.e., work plan, HASP, etc..) EPA will mobilize support and construction equipment for the excavation of contaminated soil from the disposal trenches.

2.2.1.2 Next Steps

Obtaining access agreements from all necessary parties prior to excavation start will be the next step.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333.

On October 29, 2011, an early snow/ice storm impacted power distribution to the majority of New Jersey. This event required PSE&G to prioritize work during this emergency which delayed working with PSE&G on access until late November 2011.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				

ERRS - Cleanup Contractor	\$400,000.00	\$0.00	\$400,000.00	100.00%
IAGs	\$20,000.00	\$0.00	\$20,000.00	100.00%
TAT/START	\$176,000.00	\$0.00	\$176,000.00	100.00%
CLP	\$100,000.00	\$0.00	\$100,000.00	100.00%
Intramural Costs				
Total Site Costs	\$696,000.00	\$0.00	\$696,000.00	100.00%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

At this time there are no personnel working at the Site.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

**U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Mansfield Trail Dump Site - Removal Polrep**



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II**

Subject: POLREP #2
Progress
Mansfield Trail Dump Site
38
Stanhope, NJ
Latitude: 40.9289443 Longitude: -74.6995999

To: Judith Enck, USEPA Region 2 - RA
Lisa Plevin, USEPA Region 2 -
Joe Rotola, USEPA Region 2, ERRD-RAB
Dan Harkay, USEPA Region 2 ERRD-RAB
Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB
Pat Seppi, U.S. EPA Region 2
George Zachos, USEPA Region 2
Bob McKnight, USEPA Region 2 ERRD-NJB
Mark Herzberg, NJDEP
Beckett Grealish, USEPA Region 2 ERRD-RAB
Fred Mumford, NJDEP - BEMSA

From: Louis DiGuardia, On-Scene Coordinator

Date: 1/31/2012

Reporting Period: 12/5/2011 - 1/31/2012

1. Introduction

1.1 Background

Site Number:	38	Contract Number:	EP-S2-10-03
D.O. Number:	0042	Action Memo Date:	9/29/2011
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	NPL	Operable Unit:	01
Mobilization Date:	1/31/2012	Start Date:	10/20/2011
Demob Date:		Completion Date:	
CERCLIS ID:	NJN000206345	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byram Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B, C, D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in May 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 – 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at <http://epaossc.org/mansfieldtraildump>

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. The original excavated depths of these two trenches ranged from three to five feet. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches.

Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447 square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the right-of-way (ROW) / easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
- 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
- 7) Refueling of any vehicle is prohibited on the ROW / easement;
- 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township

Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library. The affidavit for publication was completed on December 13, 2011.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the Emergency Removal and Response Services (ERRS) contractor, Environmental Restoration, LLC, to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Contaminated soil	soil				

2.2 Planning Section

2.2.1 Anticipated Activities

EPA continues the mobilization of equipment and support services to begin Site operations. EPA will finalize the work plan and HASP incorporating the conditions as per the PSE&G access agreement.

2.2.1.1 Planned Response Activities

With the completion of site plans and mobilization of equipment, EPA will begin the construction of a staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. Clearing (i.e., trees) and grubbing to the contaminated trenches will begin starting in Trench area B.

With access achieved, EPA will begin posting warning signs and limiting entry to the Site from all access points, i.e., bike and walking trails.

2.2.1.2 Next Steps

With the completion of clearing/grubbing Trench area B, continue to Trench area E. With the completion of the truck staging road, begin the construction of an access road for heavy equipment to Trench areas B & E.

Provide a subcontract for surveying of the height of the transmission line to verify that proper clearance is maintained to equipment being operated in the ROW as per the PSE&G access agreement conditions.

Initiate procurement of the specialized grounding equipment for personnel and heavy equipment operating in the ROW, as per OSHA 1910.333 and the PSE&G access agreement conditions.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & per diem, and materials anticipated for a 3 month period and is subject to change.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$400,000.00	\$120,871.54	\$279,128.46	69.78%
IAGs	\$20,000.00	\$0.00	\$20,000.00	100.00%
TAT/START	\$176,000.00	\$0.00	\$176,000.00	100.00%
CLP	\$100,000.00	\$0.00	\$100,000.00	100.00%
Intramural Costs				
Total Site Costs	\$696,000.00	\$120,871.54	\$575,128.46	82.63%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to

have an informative and complaint-free project.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Mansfield Trail Dump Site - Removal Polrep



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II**

Subject: POLREP #3
Progress
Mansfield Trail Dump Site
38
Stanhope, NJ
Latitude: 40.9289443 Longitude: -74.6995999

To: Judith Enck, USEPA Region 2 - RA
Lisa Plevin, USEPA Region 2 -
Joe Rotola, USEPA Region 2, ERRD-RAB
Dan Harkay, USEPA Region 2 ERRD-RAB
Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB
Pat Seppi, U.S. EPA Region 2
George Zachos, USEPA Region 2
Bob McKnight, USEPA Region 2 ERRD-NJB
Mark Herzberg, NJDEP
Beckett Grealish, USEPA Region 2 ERRD-RAB
Fred Mumford, NJDEP - BEMSA

From: Louis DiGuardia, On-Scene Coordinator

Date: 2/13/2012

Reporting Period: 2/1/2012 - 2/13/2012

1. Introduction

1.1 Background

Site Number:	38	Contract Number:	EP-S2-10-03
D.O. Number:	0042	Action Memo Date:	9/29/2011
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	NPL	Operable Unit:	01
Mobilization Date:	1/31/2012	Start Date:	10/20/2011
Demob Date:		Completion Date:	
CERCLIS ID:	NJN000206345	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byram Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B, C, D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in May 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 – 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at <http://epaossc.org/mansfieldtraildump>

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. The original excavated depths of these two trenches ranged from three to five feet. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches.

Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447 square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
- 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
- 7) Refueling of any vehicle is prohibited on the ROW / easement;
- 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access

agreements, ER has been tasked to provide site setup and mobilization of support equipment.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library. The affidavit for publication was completed on December 13, 2011.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC was interviewed by the New Jersey Newspaper Star Ledger on site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Contaminated soil	soil				

2.2 Planning Section

2.2.1 Anticipated Activities

EPA continues the mobilization of equipment and support services to begin Site operations. EPA has finalized the work plan and HASP incorporating the conditions as per the PSE&G access agreement.

2.2.1.1 Planned Response Activities

With the completion of site plans and mobilization of equipment, EPA will continue the construction of a staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. Clearing (i.e., trees) and grubbing to the contaminated trenches continues in Trench area B and will start in Trench area E.

EPA posted warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

2.2.1.2 Next Steps

With the completion of clearing/grubbing Trench area B, continue to Trench area E. With the completion of the truck staging road, begin the construction of an access road for heavy equipment to Trench areas B & E.

Provide a subcontract for surveying of the height of the transmission line to verify that proper clearance is maintained to equipment being operated in the ROW as per the PSE&G access agreement conditions.

Initiate procurement of the specialized grounding equipment for personnel and heavy equipment operating in the ROW, as per OSHA 1910.333 and the PSE&G access agreement conditions.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & per diem, and materials anticipated for a 3 month operations period and is subject to change.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$400,000.00	\$180,075.00	\$219,925.00	54.98%
IAGs	\$20,000.00	\$1,200.00	\$18,800.00	94.00%
TAT/START	\$176,000.00	\$0.00	\$176,000.00	100.00%
CLP	\$100,000.00	\$0.00	\$100,000.00	100.00%
Intramural Costs				
Total Site Costs	\$696,000.00	\$181,275.00	\$514,725.00	73.95%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Mansfield Trail Dump Site - Removal Polrep



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II**

Subject: POLREP #4
Progress
Mansfield Trail Dump Site
38
Stanhope, NJ
Latitude: 40.9289443 Longitude: -74.6995999

To: Judith Enck, USEPA Region 2 - RA
Lisa Plevin, USEPA Region 2 -
Joe Rotola, USEPA Region 2, ERRD-RAB
Dan Harkay, USEPA Region 2 ERRD-RAB
Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB
Pat Seppi, U.S. EPA Region 2
George Zachos, USEPA Region 2
Bob McKnight, USEPA Region 2 ERRD-NJB
Mark Herzberg, NJDEP
Beckett Grealish, USEPA Region 2 ERRD-RAB
Fred Mumford, NJDEP - BEMSA

From: Louis DiGuardia, On-Scene Coordinator

Date: 2/21/2012

Reporting Period: 2/14/2012 - 2/21/2012

1. Introduction

1.1 Background

Site Number:	38	Contract Number:	EP-S2-10-03
D.O. Number:	0042	Action Memo Date:	9/29/2011
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	NPL	Operable Unit:	01
Mobilization Date:	1/31/2012	Start Date:	10/20/2011
Demob Date:		Completion Date:	
CERCLIS ID:	NJN000206345	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byram Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B, C, D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in May 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 – 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at <http://epaossc.org/mansfieldtraildump>

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447

square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access agreements, ER has been tasked to provide site setup and mobilization of support equipment.

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
- 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
- 7) Refueling of any vehicle is prohibited on the ROW / easement;
- 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC was interviewed by the New Jersey Newspaper Star Ledger on site activities.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas B and E, and initiated in Trench area A.

EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

The U.S. Coast Guard Strike Team (Strike Team) was mobilized on February 14, 2012, to support site safety and air monitoring. The Strike Team is providing air monitoring equipment, i.e., aerial RAE's, which provide remote monitoring capability for volatile organic compounds (VOCs). The instrumentation have been set-up between site operation areas and residential structures to monitor the potential for air releases during site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Contaminated soil	soil				

2.2 Planning Section

2.2.1 Anticipated Activities

EPA continues the clearing and grubbing to all trench areas in preparation for disposal sampling and to provide information of contaminant depth in order to finalize volume estimates for transportation & disposal bids.

2.2.1.1 Planned Response Activities

Perform disposal sampling and provide information of contaminant depth in each trench, in order to finalize volume estimates for transportation & disposal bids.

The subcontract for specialized surveying of the height of the transmission line to verify that proper clearance is maintained to equipment being operated in the ROW as per the PSE&G access agreement conditions has been awarded and will begin the week of February 21, 2012.

EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

2.2.1.2 Next Steps

Perform disposal sampling and provide information of contaminant depth in each trench, in order to finalize volume estimates for transportation & disposal bids.

The subcontract for surveying of the height of the transmission line to verify that proper clearance is maintained to equipment being operated in the ROW as per the PSE&G access agreement conditions, will perform at a minimum, 2 measurements on separate days to evaluate the potential sag of the 500kV transmission line.

EPA continues the clearing and grubbing to Trench areas Upper and Lower A.

Clearing and grubbing to Trench area D will be dependent on receipt of all grounding equipment and approval from PSE&G as per the access agreement.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

Students from the local Lenape Regional High School, continue to attempt to by-pass the numerous warning signs and barriers to enter the site. The Strike Tem has done a commendable job intercepting the students and explaining the dangers associated with site activities.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & per diem, and materials anticipated for a 3 month operations period and is subject to change.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$400,000.00	\$252,788.00	\$147,212.00	36.80%

IAGs	\$20,000.00	\$1,613.00	\$18,387.00	91.94%
TAT/START	\$176,000.00	\$2,970.00	\$173,030.00	98.31%
CLP	\$100,000.00	\$0.00	\$100,000.00	100.00%
Intramural Costs				
Total Site Costs	\$696,000.00	\$257,371.00	\$438,629.00	63.02%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

**U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Mansfield Trail Dump Site - Removal Polrep**



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II**

Subject: POLREP #5
Progress
Mansfield Trail Dump Site
38
Stanhope, NJ
Latitude: 40.9289443 Longitude: -74.6995999

To: Judith Enck, USEPA Region 2 - RA
Lisa Plevin, USEPA Region 2 -
Joe Rotola, USEPA Region 2, ERRD-RAB
Dan Harkay, USEPA Region 2 ERRD-RAB
Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB
Pat Seppi, U.S. EPA Region 2
George Zachos, USEPA Region 2
Bob McKnight, USEPA Region 2 ERRD-NJB
Mark Herzberg, NJDEP
Beckett Grealish, USEPA Region 2 ERRD-RAB
Fred Mumford, NJDEP - BEMSA

From: Louis DiGuardia, On-Scene Coordinator

Date: 2/28/2012

Reporting Period: 2/22/2012 - 2/28/2012

1. Introduction

1.1 Background

Site Number:	38	Contract Number:	EP-S2-10-03
D.O. Number:	0042	Action Memo Date:	9/29/2011
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	NPL	Operable Unit:	01
Mobilization Date:	1/31/2012	Start Date:	10/20/2011
Demob Date:		Completion Date:	
CERCLIS ID:	NJN000206345	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byram Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B, C, D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in May 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 – 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at <http://epaossc.org/mansfieldtraildump>

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447

square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access agreements, ER has been tasked to provide and maintain site setup and mobilization of support equipment.

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
- 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
- 7) Refueling of any vehicle is prohibited on the ROW / easement;
- 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC and Community Involvement Coordinator was interviewed by the New Jersey Newspaper Star Ledger on site activities.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas A (Upper and Lower), B, C and E. Cleared debris around Trench area D.

Completed representative disposal sampling in Trench areas A, B, C, and E.

The U.S. Coast Guard Strike Team (Strike Team) continues to provide air monitoring, health & safety and security support for site operations. Air monitoring instrumentation continues to be set-up between site operation areas and residential structures to monitor the potential for air releases during site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Contaminated soil	soil				

2.2 Planning Section

2.2.1 Anticipated Activities

EPA continues the clearing and grubbing to all trench areas in preparation for disposal sampling and to provide information of contaminant depth in order to finalize volume estimates for transportation & disposal bids.

2.2.1.1 Planned Response Activities

Complete representative disposal sampling of all trenches and provide information of contaminant depth in each trench, in order to finalize volume estimates for transportation & disposal bids.

Install collection sumps in trenches with standing water to minimize free liquids.

EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

2.2.1.2 Next Steps

Complete representative disposal sampling and information of contaminant depth in each trench, in order to finalize volume estimates for transportation & disposal (T&D) bids, and evaluate analytical results to finalize T&D bids.

Await results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment being operated in the ROW as per the PSE&G access agreement. Two measurements on separate days to evaluate the potential sag of the 500kV transmission line will be performed.

Clearing and grubbing to Trench area D will be dependent on receipt of all grounding equipment and approval from PSE&G as per the access agreement.

The Removal Support Team (RST) has been tasked to provide air sampling to monitor site operations, soil delineation of Trench area C and to confirm post excavation limits. Limited sampling was performed by the state and EPA integrated assessment team to define material for removal in Trench Area C.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

Students from the local Lenape Regional High School, continue to attempt to by-pass the numerous warning signs and barriers to enter the site. The Strike Tem has done a commendable job intercepting the students and explaining the dangers associated with site activities.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & per diem, and materials anticipated for a 3 month operations period and is subject to change.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining

Extramural Costs				
ERRS - Cleanup Contractor	\$400,000.00	\$296,594.00	\$103,406.00	25.85%
IAGs	\$20,000.00	\$2,809.00	\$17,191.00	85.96%
TAT/START	\$176,000.00	\$7,359.00	\$168,641.00	95.82%
CLP	\$100,000.00	\$0.00	\$100,000.00	100.00%
Intramural Costs				
Total Site Costs	\$696,000.00	\$306,762.00	\$389,238.00	55.93%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Mansfield Trail Dump Site - Removal Polrep



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II**

Subject: POLREP #6
Progress
Mansfield Trail Dump Site
38
Stanhope, NJ
Latitude: 40.9289443 Longitude: -74.6995999

To: Judith Enck, USEPA Region 2 - RA
Lisa Plevin, USEPA Region 2 -
Joe Rotola, USEPA Region 2, ERRD-RAB
Dan Harkay, USEPA Region 2 ERRD-RAB
Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB
Pat Seppi, U.S. EPA Region 2
George Zachos, USEPA Region 2
Bob McKnight, USEPA Region 2 ERRD-NJB
Mark Herzberg, NJDEP
Beckett Grealish, USEPA Region 2 ERRD-RAB
Fred Mumford, NJDEP - BEMSA

From: Louis DiGuardia, On-Scene Coordinator

Date: 3/9/2012

Reporting Period: 2/29/2012 - 3/9/2012

1. Introduction

1.1 Background

Site Number:	38	Contract Number:	EP-S2-10-03
D.O. Number:	0042	Action Memo Date:	9/29/2011
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	NPL	Operable Unit:	01
Mobilization Date:	1/31/2012	Start Date:	10/20/2011
Demob Date:		Completion Date:	
CERCLIS ID:	NJN000206345	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byram Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B, C, D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in May 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 – 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at <http://epaossc.org/mansfieldtraildump>

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447

square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access agreements, ER has been tasked to provide and maintain site setup and mobilization of support equipment.

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
- 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
- 7) Refueling of any vehicle is prohibited on the ROW / easement;
- 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC and Community Involvement Coordinator was interviewed by the New Jersey Newspaper Star Ledger on site activities.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas A (Upper and Lower), B, C and E. Cleared debris around Trench area D.

EPA completed the construction of access roads to Areas A, B, C, and E. Area E has been prepared as a staging area for the stockpiling of material due to limited staging area in Area A.

Completed representative disposal sampling in Trench areas A, B, C, and E.

The U.S. Coast Guard Strike Team (Strike Team) continues to provide air monitoring, health & safety and security support for site operations. Air monitoring instrumentation continues to be set-up between site operation areas and residential structures to monitor the potential for air releases during site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Contaminated soil	soil				

2.2 Planning Section

2.2.1 Anticipated Activities

EPA continues the clearing and grubbing to all trench areas in preparation for disposal sampling and to

provide information of contaminant depth in order to finalize volume estimates for transportation & disposal bids.

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

Notification was provided to PSE&G on EPA beginning activities in Trench area D, within and underneath the 500kV transmission line, as per the access agreement. With the receipt of all specialized grounding equipment and access, representative disposal samples and depth estimates were taken from all pits (#1 - 4) in Trench Area D.

With the receipt of all analytical from Trenches A, B, C and E, non-hazardous transportation & disposal request for bids were issued. Request for proposal for transportation & disposal of non-hazardous soil has been prepared and will be issued with the receipt of funding.

2.2.1.1 Planned Response Activities

Continue to install collection sumps in trenches with standing water to minimize free liquids.

Begin the stockpiling of non-hazardous waste in Trench area E from Trench A (Upper and Lower).

2.2.1.2 Next Steps

Complete representative disposal sampling and information of contaminant depth in each trench, in order to finalize volume estimates for transportation & disposal (T&D) bids, and evaluate analytical results to finalize T&D bids.

Clearing and grubbing to Trench area D will be dependent on receipt of all grounding equipment and approval from PSE&G as per the access agreement.

The Removal Support Team (RST) has been tasked to provide air sampling to monitor site operations, soil delineation of Trench area C and to confirm post excavation limits. Limited sampling was performed by the state and EPA integrated assessment team to define material for removal in Trench Area C.

ERRS will initiate the removal and stockpiling of soil from Trench Area E (Upper and Lower) to Trench Area E due to restricted working area and limited space available in area A.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

Students from the local Lenape Regional High School, continue to attempt to by-pass the numerous warning signs and barriers to enter the site. The Strike Tem has done a commendable job intercepting the students and explaining the dangers associated with site activities.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & per diem, and materials anticipated for a 3 month operations period and is subject to change.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$400,000.00	\$335,492.00	\$64,508.00	16.13%
IAGs	\$20,000.00	\$4,667.00	\$15,333.00	76.67%
TAT/START	\$176,000.00	\$12,694.00	\$163,306.00	92.79%
CLP	\$100,000.00	\$0.00	\$100,000.00	100.00%
Intramural Costs				
Total Site Costs	\$696,000.00	\$352,853.00	\$343,147.00	49.30%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Mansfield Trail Dump Site - Removal Polrep



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II**

Subject: POLREP #7
Progress
Mansfield Trail Dump Site
38
Stanhope, NJ
Latitude: 40.9289443 Longitude: -74.6995999

To: Judith Enck, USEPA Region 2 - RA
Lisa Plevin, USEPA Region 2 -
Joe Rotola, USEPA Region 2, ERRD-RAB
Dan Harkay, USEPA Region 2 ERRD-RAB
Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB
Pat Seppi, U.S. EPA Region 2
George Zachos, USEPA Region 2
Bob McKnight, USEPA Region 2 ERRD-NJB
Mark Herzberg, NJDEP
Beckett Grealish, USEPA Region 2 ERRD-RAB
Fred Mumford, NJDEP - BEMSA

From: Louis DiGuardia, On-Scene Coordinator

Date: 3/16/2012

Reporting Period: 3/10/2012 - 3/16/2012

1. Introduction

1.1 Background

Site Number:	38	Contract Number:	EP-S2-10-03
D.O. Number:	0042	Action Memo Date:	9/29/2011
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	NPL	Operable Unit:	01
Mobilization Date:	1/31/2012	Start Date:	10/20/2011
Demob Date:		Completion Date:	
CERCLIS ID:	NJN000206345	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byram Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B, C, D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in May 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 – 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at <http://epaosr.org/mansfieldtraildump>

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447

square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access agreements, ER has been tasked to provide and maintain site setup and mobilization of support equipment.

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
- 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
- 7) Refueling of any vehicle is prohibited on the ROW / easement;
- 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC and Community Involvement Coordinator was interviewed by the New Jersey Newspaper Star Ledger on site activities.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas A (Upper and Lower), B, C and E. Cleared debris around Trench area D.

EPA completed the construction of access roads to Areas A, B, C, and E. Area E has been prepared as a staging area for the stockpiling of material due to limited staging area in Area A.

Completed representative disposal sampling in Trench areas A, B, C, and E.

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

Notification was provided to PSE&G on EPA beginning activities in Trench area D, within and underneath the 500kV transmission line, as per the access agreement. With the receipt of all specialized grounding equipment and access, representative disposal samples and depth estimates were taken from all pits (#1 - 4) in Trench Area D.

With the receipt of all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were prepared and issued on March 9, 2012. A ceiling increase of \$500,000 was received on March 13, 2012.

The U.S. Coast Guard Strike Team (Strike Team) continues to provide air monitoring, health & safety and security support for site operations. Air monitoring instrumentation continues to be set-up between site operation areas and residential structures to monitor the potential for air releases during site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
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Contaminated soil (non-hazardous)	soil				
Contaminated soil (hazardous)	soil				

2.2 Planning Section

2.2.1 Anticipated Activities

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

With the receipt of a ceiling increase and all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were issued.

Establish a hazardous and non-hazardous staging area in Trench Area E due to limited access and room for staging in Trench Area A.

ERRS initiated and completed the removal of hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (hazardous area). ERRS initiated and completed the removal of non-hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (non-hazardous area).

Additional sumps were installed in Trench Area B and Trench Area D due to excessive free liquids.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations can begin in Trench Area D (pits #1 - 4).

On March 16, 2012, the Removal Support Team (RST) air sampling results of perimeter (near residential properties) and excavation operations using T-17 method, indicated no hits on perimeter results, and very low (<1 ppbv) results within excavation operations. RST will continue to perform perimeter and excavation air sampling during operations.

2.2.1.1 Planned Response Activities

Continue to install collection sumps in trenches with standing water to minimize free liquids.

Begin the stockpiling of non-hazardous waste in Trench Area D (pits #1- #4).

2.2.1.2 Next Steps

The Removal Support Team (RST) has been tasked to provide air sampling to monitor site operations, soil delineation of Trench area C and to confirm post excavation limits. Limited sampling was performed by the state and EPA integrated assessment team to define material for removal in Trench Area C.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1).

Review and approve transportation and disposal bids for non-hazardous material disposal received on March 16, 2012.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as

defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

Students from the local Lenape Regional High School, continue to attempt to by-pass the numerous warning signs and barriers to enter the site. The Strike Tem has done a commendable job intercepting the students and explaining the dangers associated with site activities.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal (T&D) of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & per diem, and materials anticipated for a 3 month operations period and is subject to change. An await of \$200,000 to cover the cost of T&D for non-hazardous soils was added.

On March 13, 2012, a ceiling increase of \$500,000 was received.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$900,000.00	\$562,709.00	\$337,291.00	37.48%
IAGs	\$20,000.00	\$6,045.00	\$13,955.00	69.78%
TAT/START	\$176,000.00	\$15,644.00	\$160,356.00	91.11%
CLP/Regional Lab	\$100,000.00	\$40,000.00	\$60,000.00	60.00%
Intramural Costs				
Total Site Costs	\$1,196,000.00	\$624,398.00	\$571,602.00	47.79%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of

residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

**U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Mansfield Trail Dump Site - Removal Polrep**



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II**

Subject: POLREP #8
Progress
Mansfield Trail Dump Site
38
Stanhope, NJ
Latitude: 40.9289443 Longitude: -74.6995999

To: Judith Enck, USEPA Region 2 - RA
Lisa Plevin, USEPA Region 2 -
Joe Rotola, USEPA Region 2, ERRD-RAB
Dan Harkay, USEPA Region 2 ERRD-RAB
Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB
Pat Seppi, U.S. EPA Region 2
George Zachos, USEPA Region 2
Bob McKnight, USEPA Region 2 ERRD-NJB
Mark Herzberg, NJDEP
Beckett Grealish, USEPA Region 2 ERRD-RAB
Fred Mumford, NJDEP - BEMSA

From: Louis DiGuardia, On-Scene Coordinator

Date: 3/23/2012

Reporting Period: 3/17/2012 - 3/23/2012

1. Introduction

1.1 Background

Site Number:	38	Contract Number:	EP-S2-10-03
D.O. Number:	0042	Action Memo Date:	9/29/2011
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Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	NPL	Operable Unit:	01
Mobilization Date:	1/31/2012	Start Date:	10/20/2011
Demob Date:		Completion Date:	
CERCLIS ID:	NJN000206345	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byram Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B, C, D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However, a review of historic aerial photos and additional reconnaissance efforts in May 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 – 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at <http://epaossc.org/mansfieldtraildump>

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447

square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access agreements, ER has been tasked to provide and maintain site setup and mobilization of support equipment.

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
- 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
- 7) Refueling of any vehicle is prohibited on the ROW / easement;
- 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC and Community Involvement Coordinator was interviewed by the New Jersey Newspaper Star Ledger on site activities. The article was in the March 18, 2012, Sunday edition.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas A (Upper and Lower), B, C and E. Cleared debris around Trench area D.

EPA completed the construction of access roads to Areas A, B, C, and E. Area E has been prepared as a staging area for the stockpiling of material due to limited staging area in Area A.

Completed representative disposal sampling in Trench areas A, B, C, and E.

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

Notification was provided to PSE&G on EPA beginning activities in Trench area D, within and underneath the 500kV transmission line, as per the access agreement. With the receipt of all specialized grounding equipment and access, representative disposal samples and depth estimates were taken from all pits (#1 - 4) in Trench Area D.

With the receipt of all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were prepared and issued on March 9, 2012. A CERCLA compliance check was approved for the Cumberland County Landfill, Shippensburg, PA, for non-hazardous soil on March 16, 2012.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations began in Trench Area D (pits #1 - 4)

From March 22 - 23, 2012, approximately 551.69 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA.

The U.S. Coast Guard Strike Team (Strike Team) continues to provide air monitoring, health & safety and security support for site operations. Air monitoring instrumentation continues to be set-up between site operation areas and residential structures to monitor the potential for air releases during site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Contaminated soil (non-hazardous)	soil	551.69	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (hazardous)	soil				

2.2 Planning Section

2.2.1 Anticipated Activities

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

With the receipt of a ceiling increase and all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were issued awarded to the Cumberland County Landfill, Shippensburg, PA. CERCLA compliance approval was received for the facility.

Establish a hazardous and non-hazardous staging area in Trench Area E due to limited access and room for staging in Trench Area A.

ERRS initiated and completed the removal of hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (hazardous area). ERRS initiated and completed the removal of non-hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (non-hazardous area).

Additional sumps were installed in Trench Area B and Trench Area D due to excessive free liquids.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations can begin in Trench Area D (pits #1 - 4)

ERRS began and completed excavation to bedrock from Trench Area D (pit# 4). ERRS continued excavation in Trench Area D (pit# 3). It should be noted that Trench Area D pits# 3 and 2, merge at a point to become one pit.

From March 22 - 23, 2012, approximately 551.69 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA.

2.2.1.1 Planned Response Activities

Continue stockpiling of non-hazardous waste from Trench Area D (pits #1- 3).

Continue transportation and disposal of non-hazardous waste to Cumberland County Landfill, Shippensburg, PA.

Results of RST perimeter and site operation air sampling indicate non-detect (@ .5 ug/m3) for volatiles organics along the perimeter and < 1 ug/m3 for site operations.

2.2.1.2 Next Steps

The Removal Support Team (RST) continues to provide air sampling to monitor site operations, soil delineation of Trench area C and to confirm post excavation limits. Limited sampling was performed by the state and EPA integrated assessment team to define material for removal in Trench Area C.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-3).

Continue transportation and disposal of non-hazardous waste to Cumberland County Landfill, Shippensburg, PA.

Await transportation and disposal bids for hazardous material disposal expected to be received on March 27, 2012.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

Students from the local Lenape Regional High School, continue to attempt to by-pass the numerous warning signs and barriers to enter the site. The Strike Tem has done a commendable job intercepting the students and explaining the dangers associated with site activities.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & per diem, and materials anticipated for a 3 month operations period and is subject to change.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				

ERRS - Cleanup Contractor	\$1,400,000.00	\$533,512.00	\$866,488.00	61.89%
IAGs	\$20,000.00	\$7,485.00	\$12,515.00	62.58%
TAT/START	\$176,000.00	\$36,808.00	\$139,192.00	79.09%
CLP/Regional Lab	\$100,000.00	\$40,000.00	\$60,000.00	60.00%
Intramural Costs				
Total Site Costs	\$1,696,000.00	\$617,805.00	\$1,078,195.00	63.57%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Mansfield Trail Dump Site - Removal Polrep



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II**

Subject: POLREP #9
Progress
Mansfield Trail Dump Site
38
Stanhope, NJ
Latitude: 40.9289443 Longitude: -74.6995999

To: Judith Enck, USEPA Region 2 - RA
Lisa Plevin, USEPA Region 2 -
Joe Rotola, USEPA Region 2, ERRD-RAB
Dan Harkay, USEPA Region 2 ERRD-RAB
Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB
Pat Seppi, U.S. EPA Region 2
George Zachos, USEPA Region 2
Bob McKnight, USEPA Region 2 ERRD-NJB
Mark Herzberg, NJDEP
Beckett Grealish, USEPA Region 2 ERRD-RAB
Fred Mumford, NJDEP - BEMSA

From: Louis DiGuardia, On-Scene Coordinator

Date: 3/30/2012

Reporting Period: 3/24/2012 - 3/30/2012

1. Introduction

1.1 Background

Site Number:	38	Contract Number:	EP-S2-10-03
D.O. Number:	0042	Action Memo Date:	9/29/2011
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	NPL	Operable Unit:	01
Mobilization Date:	1/31/2012	Start Date:	10/20/2011
Demob Date:		Completion Date:	
CERCLIS ID:	NJN000206345	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byram Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B, C, D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in May 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 – 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at <http://epaossc.org/mansfieldtraildump>

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447

square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access agreements, ER has been tasked to provide and maintain site setup and mobilization of support equipment.

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
- 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
- 7) Refueling of any vehicle is prohibited on the ROW / easement;
- 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC and Community Involvement Coordinator was interviewed by the New Jersey Newspaper Star Ledger on site activities. The article was in the March 18, 2012, Sunday edition.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas A (Upper and Lower), B, C and E. Cleared debris around Trench area D.

EPA completed the construction of access roads to Areas A, B, C, and E. Area E has been prepared as a staging area for the stockpiling of material due to limited staging area in Area A.

Completed representative disposal sampling in Trench areas A, B, C, and E.

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

Notification was provided to PSE&G on EPA beginning activities in Trench area D, within and underneath the 500kV transmission line, as per the access agreement. With the receipt of all specialized grounding equipment and access, representative disposal samples and depth estimates were taken from all pits (#1 - 4) in Trench Area D.

With the receipt of all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were prepared and issued on March 9, 2012. Award for the non-hazardous T&D was awarded on March 16, 2012, dependent on off-site compliance approval. A CERCLA compliance check was approved for the Cumberland County Landfill, Shippensburg, PA, for non-hazardous soil on March 16, 2012.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

RST collected post confirmation samples from Trench Area A (Lower & Upper) on March 15 - 16, 2012.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations began in Trench Area D (pits #1 - 4)

Results of RST perimeter and site operation air sampling taken on March 14, 2012, indicate non-detect (@ .5 ug/m³) for volatiles organics along the perimeter and < 1 ug/m³ for site operations.

Between March 22 - 30, 2012, approximately 3,200 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA.

The U.S. Coast Guard Strike Team (Strike Team) continues to provide air monitoring, health & safety and security support for site operations. Air monitoring instrumentation continues to be set-up between site operation areas and residential structures to monitor the potential for air releases during site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Contaminated soil (non-hazardous)	soil	3,200 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (hazardous)	soil				

2.2 Planning Section

2.2.1 Anticipated Activities

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

With the receipt of a ceiling increase and all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request was awarded to the Cumberland County Landfill, Shippensburg, PA. CERCLA compliance approval was received for the facility.

ERRS initiated and completed the removal of hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (hazardous area). ERRS initiated and completed the removal of non-hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (non-hazardous area).

Additional sumps were installed in Trench Area B and Trench Area D due to excessive free liquids.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations can begin in Trench Area D (pits #1 - 4)

ERRS began and completed excavation to bedrock in Trench Area D (pit# 4). ERRS continued excavation in Trench Area D (pit# 3 and 2). It should be noted that Trench Area D pits# 3 and 2, merge at a point to become one pit.

On March 26, 2012, RST performed post confirmation sampling of Trench Area B. Samples were submitted to the USEPA DESA Edison, NJ lab for analysis.

On March 27, 2012, ERRS received the response for bids for T&D on the hazardous soil (D040). Based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment.

On March 27, 2012, EPA received from the USEPA DESA Edison, NJ Lab, validated results of delineation sampling of Trench Area C. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup criteria for protection of groundwater.

On March 28, 2012, RST performed post confirmation sampling of Trench Area D (pit# 4). Samples were submitted to the USEPA DESA Edison, NJ Lab for analysis

Between March 22 - 30, 2012, approximately 3,200 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA.

2.2.1.1 Planned Response Activities

Continue stockpiling of non-hazardous waste from Trench Area D (pits #1-3).

Continue transportation and disposal of non-hazardous waste to Cumberland County Landfill, Shippensburg, PA.

Results of RST perimeter and site operation air sampling indicate non-detect (@ .5 ug/m3) for volatiles organics along the perimeter and < 1 ug/m3 for site operations.

2.2.1.2 Next Steps

The Removal Support Team (RST) continues to provide air sampling to monitor site operations, and to take post confirmation soil sampling in all Trench areas excavated.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-3).

Continue T&D of non-hazardous waste to Cumberland County Landfill, Shippensburg, PA.

A clarified T&D bid for hazardous material was re-issued on March 30, 2012.

Evaluate clean fill bids for restoration operations dependent upon an independent EPA analysis of the material to confirm they meet EPA standards for clean fill.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

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All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

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2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & per diem, and materials anticipated for a 3 month operations period and is subject to change.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$1,400,000.00	\$632,171.00	\$767,829.00	54.84%
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TAT/START	\$176,000.00	\$42,664.00	\$133,336.00	75.76%
CLP/Regional Lab	\$100,000.00	\$40,000.00	\$60,000.00	60.00%
Intramural Costs				
Total Site Costs	\$1,696,000.00	\$723,836.00	\$972,164.00	57.32%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

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The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Mansfield Trail Dump Site - Removal Polrep



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II**

Subject: POLREP #10
Progress
Mansfield Trail Dump Site
38
Stanhope, NJ
Latitude: 40.9289443 Longitude: -74.6995999

To: Judith Enck, USEPA Region 2 - RA
Lisa Plevin, USEPA Region 2 -
Joe Rotola, USEPA Region 2, ERRD-RAB
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Mark Herzberg, NJDEP
Beckett Grealish, USEPA Region 2 ERRD-RAB
Fred Mumford, NJDEP - BEMSA

From: Louis DiGuardia, On-Scene Coordinator

Date: 4/5/2012

Reporting Period: 4/2/2012 - 4/5/2012

1. Introduction

1.1 Background

Site Number:	38	Contract Number:	EP-S2-10-03
D.O. Number:	0042	Action Memo Date:	9/29/2011
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Response Lead:	EPA	Incident Category:	Removal Action
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FPN#:		Reimbursable Account #:	

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1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byram Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B, C, D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in May 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 – 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at <http://epaossc.org/mansfieldtraildump>

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447

square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access agreements, ER has been tasked to provide and maintain site setup and mobilization of support equipment.

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

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- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
- 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
- 7) Refueling of any vehicle is prohibited on the ROW / easement;
- 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

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On February 2, 2012, the EPA OSC and Community Involvement Coordinator was interviewed by the New Jersey Newspaper Star Ledger on site activities. The article was in the March 18, 2012, Sunday edition.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas A (Upper and Lower), B, C and E. Cleared debris around Trench area D.

EPA completed the construction of access roads to Areas A, B, C, and E. Area E has been prepared as a staging area for the stockpiling of material due to limited staging area in Area A.

Completed representative disposal sampling in Trench areas A, B, C, and E.

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

Notification was provided to PSE&G on EPA beginning activities in Trench area D, within and underneath the 500kV transmission line, as per the access agreement. With the receipt of all specialized grounding equipment and access, representative disposal samples and depth estimates were taken from all pits (#1 - 4) in Trench Area D.

With the receipt of all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were prepared and issued on March 9, 2012. Award for the non-hazardous T&D was awarded on March 16, 2012, dependent on off-site compliance approval. A CERCLA compliance check was approved for the Cumberland County Landfill, Shippensburg, PA, for non-hazardous soil on March 16, 2012.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

RST collected post confirmation samples from Trench Area A (Lower & Upper) on March 15 - 16, 2012.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations began in Trench Area D (pits #1 - 4)

Results of RST perimeter and site operation air sampling taken on March 14, 2012, indicate non-detect (@ .5 ug/m³) for volatiles organics along the perimeter and < 1 ug/m³ for site operations.

Between March 22, 2012 and April 5, 2012, approximately 3,700 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA.

The U.S. Coast Guard Strike Team (Strike Team) continues to provide air monitoring, health & safety and security support for site operations. Air monitoring instrumentation continues to be set-up between site operation areas and residential structures to monitor the potential for air releases during site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Contaminated soil (non-hazardous)	soil	3700 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (hazardous)	soil				

2.2 Planning Section

2.2.1 Anticipated Activities

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

With the receipt of a ceiling increase and all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request was awarded to the Cumberland County Landfill, Shippensburg, PA. CERCLA compliance approval was received for the facility.

ERRS initiated and completed the removal of hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (hazardous area). ERRS initiated and completed the removal of non-hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (non-hazardous area).

Additional sumps were installed in Trench Area B and Trench Area D due to excessive free liquids.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations can begin in Trench Area D (pits #1 - 4)

ERRS began and completed excavation to bedrock in Trench Area D (pit# 4). ERRS continued excavation in Trench Area D (pit# 3 and 2). It should be noted that Trench Area D pits# 3 and 2, merge at a point to become one pit. Excavation in the northern section of Trench Area D (pit #2) approached depths of 20 ft, before hitting bedrock and is indicated to be more widespread.

On March 26, 2012, RST performed post confirmation sampling of Trench Area B. Samples were submitted to the USEPA DESA Edison, NJ lab for analysis. Results indicate one small location requires

additional excavation (approximately 10 cubic yards).

On March 27, 2012, ERRS received the response for bids for T&D on the hazardous soil (D040). Based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid is expected to be reviewed and approved the week of April 9, 2012.

On March 27, 2012, EPA received from the USEPA DESA Edison, NJ Lab, validated results of delineation sampling of Trench Area C. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup criteria for protection of groundwater.

On March 28, 2012, RST performed post confirmation sampling of Trench Area D (pit# 4). Samples were submitted to the USEPA DESA Edison, NJ Lab for analysis. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup criteria for protection of groundwater.

Between March 22, 2012 and April 5, 2012, approximately 3,700 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA.

2.2.1.1 Planned Response Activities

Continue stockpiling of non-hazardous waste from Trench Area D (pits #1-2).

Continue transportation and disposal of non-hazardous waste to Cumberland County Landfill, Shippensburg, PA.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued to accommodate up to 2,500 additional tons of material with options up to 7,500 tons.

Results of RST perimeter and site operation air sampling indicate non-detect (@ .5 ug/m3) for volatiles organics along the Site perimeter. Operations (i.e., excavation) air data indicate levels up to 3 ug/m3 for TCE and 20 ug/m3 for total VOCs (chlorobenzene, cis-dichloroethene, xylenes, toluene, etc.).

2.2.1.2 Next Steps

The Removal Support Team (RST) continues to provide air sampling to monitor site operations, and to take post confirmation soil sampling in all Trench areas excavated.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued to accommodate up to 2,500 additional tons of material with options up to 7,500 tons.

A clarified T&D bid for hazardous soil (D040) was re-issued on March 30, 2012, based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid is expected to be reviewed and approved the week of April 9, 2012.

EPA sampled the proposed vendor clean backfill on April 4, 2012, to confirm they meet EPA standards for clean fill.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

Students from the local Lenape Regional High School, continue to attempt to by-pass the numerous warning signs and barriers to enter the site. The Strike Tem has done a commendable job intercepting the students and explaining the dangers associated with site activities.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & per diem, and materials anticipated for a 3 month operations period and is subject to change.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$1,400,000.00	\$744,007.00	\$655,993.00	46.86%
IAGs	\$20,000.00	\$12,500.00	\$7,500.00	37.50%
TAT/START	\$176,000.00	\$55,049.00	\$120,951.00	68.72%
CLP/Regional Lab	\$100,000.00	\$60,000.00	\$40,000.00	40.00%
Intramural Costs				
Total Site Costs	\$1,696,000.00	\$871,556.00	\$824,444.00	48.61%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to

have an informative and complaint-free project.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

**U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Mansfield Trail Dump Site - Removal Polrep**



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II**

Subject: POLREP #11
Progress
Mansfield Trail Dump Site
38
Stanhope, NJ
Latitude: 40.9289443 Longitude: -74.6995999

To: Judith Enck, USEPA Region 2 - RA
Lisa Plevin, USEPA Region 2 -
Joe Rotola, USEPA Region 2, ERRD-RAB
Dan Harkay, USEPA Region 2 ERRD-RAB
Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB
Pat Seppi, U.S. EPA Region 2
George Zachos, USEPA Region 2
Bob McKnight, USEPA Region 2 ERRD-NJB
Mark Herzberg, NJDEP
Beckett Grealish, USEPA Region 2 ERRD-RAB
Fred Mumford, NJDEP - BEMSA

From: Louis DiGuardia, On-Scene Coordinator

Date: 4/13/2012

Reporting Period: 4/9/2012 - 4/13/2012

1. Introduction

1.1 Background

Site Number:	38	Contract Number:	EP-S2-10-03
D.O. Number:	0042	Action Memo Date:	9/29/2011
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	NPL	Operable Unit:	01
Mobilization Date:	1/31/2012	Start Date:	10/20/2011
Demob Date:		Completion Date:	
CERCLIS ID:	NJN000206345	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byram Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

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EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at <http://epaossc.org/mansfieldtraildump>

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The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

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EPA completed the construction of access roads to Areas A, B, C, and E. Area E has been prepared as a staging area for the stockpiling of material due to limited staging area in Area A.

Completed representative disposal sampling in Trench areas A, B, C, and E.

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

Notification was provided to PSE&G on EPA beginning activities in Trench area D, within and underneath the 500kV transmission line, as per the access agreement. With the receipt of all specialized grounding equipment and access, representative disposal samples and depth estimates were taken from all pits (#1 - 4) in Trench Area D.

With the receipt of all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were prepared and issued on March 9, 2012. Award for the non-hazardous T&D was awarded on March 16, 2012, dependent on off-site compliance approval. A CERCLA compliance check was approved for the Cumberland County Landfill, Shippensburg, PA, for non-hazardous soil on March 16, 2012.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On March 15, 2012, EPA-RAB (Greg DeAngelos) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

RST collected post confirmation samples from Trench Area A (Lower & Upper) on March 15 - 16, 2012.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations began in Trench Area D (pits #1 - 4)

Results of RST perimeter and site operation air sampling taken on March 14, 2012, indicate non-detect (@ .5 ug/m³) for volatiles organics along the perimeter and < 1 ug/m³ for site operations.

Between March 22, 2012 and April 13, 2012, approximately 4,950 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA. This includes approximately 222.38 tons of reactive sulfide waste.

The U.S. Coast Guard Strike Team (Strike Team) continues to provide air monitoring, health & safety and security support for site operations. Air monitoring instrumentation continues to be set-up between site operation areas and residential structures to monitor the potential for air releases during site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Contaminated soil (non-hazardous)	soil	4,950 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (reactive sulfide)	soil	222.38 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (hazardous)					

2.2 Planning Section

2.2.1 Anticipated Activities

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

With the receipt of a ceiling increase and all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request was awarded to the Cumberland County Landfill, Shippensburg, PA. CERCLA compliance approval was received for the facility.

ERRS initiated and completed the removal of hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (hazardous area). ERRS initiated and completed the removal of non-hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (non-hazardous area).

Additional sumps were installed in Trench Area B and Trench Area D due to excessive free liquids.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations can begin in Trench Area D (pits #1 - 4)

ERRS began and completed excavation to bedrock in Trench Area D (pit# 4). ERRS continued excavation in Trench Area D (pit# 3 and 2). It should be noted that Trench Area D pits# 3 and 2, merge at a point to become one pit. Excavation in the northern section of Trench Area D (pit #2) approached depths of 20 ft, before hitting bedrock and is indicated to be more widespread.

On March 26, 2012, RST performed post confirmation sampling of Trench Area B. Samples were submitted to the USEPA DESA Edison, NJ lab for analysis. Results indicate one small location requires additional excavation (approximately 100 cubic yards).

On March 27, 2012, ERRS received the response for bids for T&D on the hazardous soil (D040). Based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012.

On March 27, 2012, EPA received from the USEPA DESA Edison, NJ Lab, validated results of delineation sampling of Trench Area C. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup criteria for protection of groundwater.

On March 28, 2012, RST performed post confirmation sampling of Trench Area D (pit# 4). Samples were submitted to the USEPA DESA Edison, NJ Lab for analysis. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup criteria for protection of groundwater.

Between March 22, 2012 and April 13, 2012, approximately 4,950 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA. This includes approximately 222.38 tons of reactive sulfide waste.

2.2.1.1 Planned Response Activities

Continue stockpiling of non-hazardous waste from Trench Area D (pits #1-2).

Continue transportation and disposal of non-hazardous waste to Cumberland County Landfill, Shippensburg, PA.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued to accommodate up to 2,500 additional tons of material with options up to 7,500 tons.

Excavation activities has uncovered a "dark green material", which is uncharacteristic of the material profiled to-date. Based upon this, samples have been forwarded to the lab for analysis. This material has been segregated from the other non-hazardous waste material until analysis is received.

Results of RST perimeter and site operation air sampling indicate non-detect (@ .5 ug/m3) for volatiles organics along the Site perimeter. Operations (i.e., excavation) air data indicate levels up to 3 ug/m3 for TCE and 20 ug/m3 for total VOCs (chlorobenzene, cis-dichloroethene, xylenes, toluene, etc.).

2.2.1.2 Next Steps

The Removal Support Team (RST) continues to provide air sampling to monitor site operations, and to take post confirmation soil sampling in all Trench areas excavated.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued to accommodate up to 2,500 additional tons of material with options up to 7,500 tons.

A clarified T&D bid for hazardous soil (D040) was re-issued on March 30, 2012, based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11,

2012.

EPA will await analysis of the "dark green material", uncovered from excavation activities, which is uncharacteristic of the material profiled to-date. Data should be received on Tuesday, April 17, 2012. This material will continue to be segregated from the other non-hazardous waste material until analysis is received.

EPA sampled the proposed vendor clean backfill on April 4, 2012, and received data which confirmed they meet EPA standards for clean fill.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

Students from the local Lenape Regional High School, continue to attempt to by-pass the numerous warning signs and barriers to enter the site. The Strike Tem has done a commendable job intercepting the students and explaining the dangers associated with site activities.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & per diem, and materials anticipated for a 3 month operations period and is subject to change.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$1,400,000.00	\$755,596.00	\$644,404.00	46.03%
IAGs	\$20,000.00	\$15,500.00	\$4,500.00	22.50%
TAT/START	\$176,000.00	\$63,049.00	\$112,951.00	64.18%
CLP/Regional Lab	\$100,000.00	\$60,000.00	\$40,000.00	40.00%
Intramural Costs				
Total Site Costs	\$1,696,000.00	\$894,145.00	\$801,855.00	47.28%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

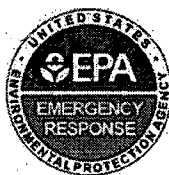
6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

**U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Mansfield Trail Dump Site - Removal Polrep**



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II**

Subject: POLREP #12
Progress
Mansfield Trail Dump Site
38
Stanhope, NJ
Latitude: 40.9289443 Longitude: -74.6995999

To: Judith Enck, USEPA Region 2 - RA
Lisa Plevin, USEPA Region 2 -
Joe Rotola, USEPA Region 2, ERRD-RAB
Dan Harkay, USEPA Region 2 ERRD-RAB
Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB
Pat Seppi, U.S. EPA Region 2
George Zachos, USEPA Region 2
Bob McKnight, USEPA Region 2 ERRD-NJB
Mark Herzberg, NJDEP
Beckett Grealish, USEPA Region 2 ERRD-RAB
Fred Mumford, NJDEP - BEMSA

From: Louis DiGuardia, On-Scene Coordinator

Date: 4/20/2012

Reporting Period: 4/16/2012 - 4/20/2012

1. Introduction

1.1 Background

Site Number:	38	Contract Number:	EP-S2-10-03
D.O. Number:	0042	Action Memo Date:	9/29/2011
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	NPL	Operable Unit:	01
Mobilization Date:	1/31/2012	Start Date:	10/20/2011
Demob Date:		Completion Date:	
CERCLIS ID:	NJN000206345	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byram Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B, C, D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in May 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 – 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at <http://epaossc.org/mansfieldtraildump>

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447

square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access agreements, ER has been tasked to provide and maintain site setup and mobilization of support equipment.

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
- 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
- 7) Refueling of any vehicle is prohibited on the ROW / easement;
- 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC and Community Involvement Coordinator was interviewed by the New Jersey Newspaper Star Ledger on site activities. The article was in the March 18, 2012, Sunday edition.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas A (Upper and Lower), B, C and E. Cleared debris around Trench area D.

EPA completed the construction of access roads to Areas A, B, C, and E. Area E has been prepared as a staging area for the stockpiling of material due to limited staging area in Area A.

Completed representative disposal sampling in Trench areas A, B, C, and E.

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

Notification was provided to PSE&G on EPA beginning activities in Trench area D, within and underneath the 500kV transmission line, as per the access agreement. With the receipt of all specialized grounding equipment and access, representative disposal samples and depth estimates were taken from all pits (#1 - 4) in Trench Area D.

With the receipt of all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were prepared and issued on March 9, 2012. Award for the non-hazardous T&D was awarded on March 16, 2012, dependent on off-site compliance approval. A CERCLA compliance check was approved for the Cumberland County Landfill, Shippensburg, PA, for non-hazardous soil on March 16, 2012.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

RST collected post confirmation samples from Trench Area A (Lower & Upper) on March 15 - 16, 2012.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations began in Trench Area D (pits #1 - 4)

Results of RST perimeter and site operation air sampling taken on March 14, 2012, indicate non-detect (@ .5 ug/m³) for volatiles organics along the perimeter and < 1 ug/m³ for site operations.

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2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Contaminated soil (non-hazardous)	soil	4,950 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (reactive sulfide)	soil	222.38 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (hazardous)					

2.2 Planning Section

2.2.1 Anticipated Activities

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

With the receipt of a ceiling increase and all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request was awarded to the Cumberland County Landfill, Shippensburg, PA. CERCLA compliance approval was received for the facility.

ERRS initiated and completed the removal of hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (hazardous area). ERRS initiated and completed the removal of non-hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (non-hazardous area).

Additional sumps were installed in Trench Area B and Trench Area D due to excessive free liquids.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations can begin in Trench Area D (pits #1 - 4)

ERRS began and completed excavation to bedrock in Trench Area D (pit# 4). ERRS continued excavation in Trench Area D (pit# 3 and 2). It should be noted that Trench Area D pits# 3 and 2, merge at a point to become one pit. Excavation in the northern section of Trench Area D (pit #2) approached depths of 20 ft, before hitting bedrock and is indicated to be more widespread.

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On March 27, 2012, ERRS received the response for bids for T&D on the hazardous soil (D040). Based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012.

On March 27, 2012, EPA received from the USEPA DESA Edison, NJ Lab, validated results of delineation sampling of Trench Area C. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup criteria for protection of groundwater.

On March 28, 2012, RST performed post confirmation sampling of Trench Area D (pit# 4). Samples were submitted to the USEPA DESA Edison, NJ Lab for analysis. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup criteria for protection of groundwater.

Between March 22, 2012 and April 13, 2012, approximately 4,950 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA. This includes approximately 222.38 tons of reactive sulfide waste.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued on April 11, 2012, to accommodate up to 2,500 additional tons of material with options up to 7,500 tons.

A clarified T&D bid for hazardous soil (D040) was re-issued on March 30, 2012, based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012. Numerous profile re-visions clarifying underlying hazardous constituents have been provided to the disposal facility to support disposal acceptance. EPA anticipates approval the week of April 23, 2012.

During the week of April 9, 2012, EPA sent representative samples of the "dark green material", uncovered from excavation activities, which is uncharacteristic of the material profiled to-date for analysis. Data should be received on Tuesday, April 17, 2012. This material will continue to be segregated from the other non-hazardous waste material until analysis is received.

EPA received, on April 17, 2012, analytical results of the "dark green material", uncovered from excavation activities, which appeared to be uncharacteristic of the material profiled to-date. Data received indicates the material is consistent with the non-hazardous material profiled.

2.2.1.1 Planned Response Activities

Continue stockpiling of non-hazardous waste from Trench Area D (pits #1-2).

Continue transportation and disposal of non-hazardous waste to Cumberland County Landfill, Shippensburg, PA.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued to accommodate up to 2,500 additional tons of material with options up to 7,500 tons.

EPA received analytical results of the "dark green material", uncovered from excavation activities, which

appeared to be uncharacteristic of the material profiled to-date. Data received indicates the material is consistent with the non-hazardous material profiled.

Additional results of RST perimeter and site operation air sampling indicate non-detect (@ .5 ug/m3) for volatiles organics along the Site perimeter. Operations (i.e., excavation) air data continue to indicate levels up to 3 ug/m3 for TCE and 20 ug/m3 for total VOCs (chlorobenzene, cis-dichloroethene, xylenes, toluene, etc.).

2.2.1.2 Next Steps

The Removal Support Team (RST) continues to provide air sampling to monitor site operations, and to take post confirmation soil sampling in all Trench areas excavated.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued to accommodate up to 2,500 additional tons of material with options up to 7,500 tons.

A clarified T&D bid for hazardous soil (D040) was re-issued on March 30, 2012, based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012. Numerous profile re-visions clarifying underlying hazardous constituents have been provided to the disposal facility to support disposal acceptance. EPA anticipates approval the week of April 23, 2012.

EPA sampled the proposed vendor clean backfill on April 4, 2012, and received data which confirmed they meet EPA standards for clean fill.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

Students from the local Lenape Regional High School, continue to attempt to by-pass the numerous warning signs and barriers to enter the site. The Strike Team has done a commendable job intercepting the students and explaining the dangers associated with site activities.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & per diem, and materials anticipated for a 3 month operations period and is subject to change.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On

March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$1,400,000.00	\$719,460.00	\$680,540.00	48.61%
IAGs	\$20,000.00	\$16,500.00	\$3,500.00	17.50%
TAT/START	\$176,000.00	\$63,049.00	\$112,951.00	64.18%
CLP/Regional Lab	\$100,000.00	\$60,000.00	\$40,000.00	40.00%
Intramural Costs				
Total Site Costs	\$1,696,000.00	\$859,009.00	\$836,991.00	49.35%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

**U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Mansfield Trail Dump Site - Removal Polrep**



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II**

Subject: POLREP #13
Progress
Mansfield Trail Dump Site
38
Stanhope, NJ
Latitude: 40.9289443 Longitude: -74.6995999

To: Judith Enck, USEPA Region 2 - RA
Lisa Plevin, USEPA Region 2 -
Joe Rotola, USEPA Region 2, ERRD-RAB
Dan Harkay, USEPA Region 2 ERRD-RAB
Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB
Pat Seppi, U.S. EPA Region 2
George Zachos, USEPA Region 2
Bob McKnight, USEPA Region 2 ERRD-NJB
Mark Herzberg, NJDEP
Beckett Grealish, USEPA Region 2 ERRD-RAB
Fred Mumford, NJDEP - BEMSA

From: Louis DiGuardia, On-Scene Coordinator

Date: 4/27/2012

Reporting Period: 4/23/2012 - 4/27/2012

1. Introduction

1.1 Background

Site Number:	38	Contract Number:	EP-S2-10-03
D.O. Number:	0042	Action Memo Date:	9/29/2011
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	NPL	Operable Unit:	01
Mobilization Date:	1/31/2012	Start Date:	10/20/2011
Demob Date:		Completion Date:	
CERCLIS ID:	NJN000206345	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byram Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B, C, D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in May 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 – 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at <http://epaossc.org/mansfieldtraildump>.

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447

square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access agreements, ER has been tasked to provide and maintain site setup and mobilization of support equipment.

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
- 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
- 7) Refueling of any vehicle is prohibited on the ROW / easement;
- 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC and Community Involvement Coordinator was interviewed by the New Jersey Newspaper Star Ledger on site activities. The article was in the March 18, 2012, Sunday edition.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas A (Upper and Lower), B, C and E. Cleared debris around Trench area D.

EPA completed the construction of access roads to Areas A, B, C, and E. Area E has been prepared as a staging area for the stockpiling of material due to limited staging area in Area A.

Completed representative disposal sampling in Trench areas A, B, C, and E.

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

Notification was provided to PSE&G on EPA beginning activities in Trench area D, within and underneath the 500kV transmission line, as per the access agreement. With the receipt of all specialized grounding equipment and access, representative disposal samples and depth estimates were taken from all pits (#1 - 4) in Trench Area D.

With the receipt of all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were prepared and issued on March 9, 2012. Award for the non-hazardous T&D was awarded on March 16, 2012, dependent on off-site compliance approval. A CERCLA compliance check was approved for the Cumberland County Landfill, Shippensburg, PA, for non-hazardous soil on March 16, 2012.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On March 15, 2012, EPA-RAB (Greg DeAngelos) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

RST collected post confirmation samples from Trench Area A (Lower & Upper) on March 15 - 16, 2012.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations began in Trench Area D (pits #1 - 4)

Results of RST perimeter and site operation air sampling taken on March 14, 2012, indicate non-detect (@ .5 ug/m³) for volatiles organics along the perimeter and < 1 ug/m³ for site operations.

Between March 22, 2012 and April 13, 2012, approximately 4,950 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA. This includes approximately 222.38 tons of reactive sulfide waste.

On March 30, 2012, a clarified T&D bid for hazardous soil (D040) was re-issued based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012. Numerous profile re-visions clarifying underlying hazardous constituents have been provided to the disposal facility to support disposal acceptance. EPA anticipates approval the week of April 23, 2012.

During the week of April 9, 2012, EPA sent representative samples of the "dark green material", uncovered from excavation activities, which is uncharacteristic of the material profiled to-date for analysis. Data should be received on Tuesday, April 17, 2012. This material was segregated from the other non-hazardous waste material until analysis was received.

EPA received on April 17, 2012, analytical results of the "dark green material", uncovered from excavation activities, which appeared to be uncharacteristic of the material profiled to-date. Data received indicates the material is consistent with the non-hazardous material profiled to-date.

The U.S. Coast Guard Strike Team (Strike Team) continues to provide air monitoring, health & safety and security support for site operations. Air monitoring instrumentation continues to be set-up between site operation areas and residential structures to monitor the potential for air releases during site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Contaminated soil (non-hazardous)	soil	4,950 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (reactive sulfide)	soil	222.38 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (hazardous)					

2.2 Planning Section

2.2.1 Anticipated Activities

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

With the receipt of a ceiling increase and all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request was awarded to the Cumberland County Landfill, Shippensburg, PA. CERCLA compliance approval was received for the facility.

ERRS initiated and completed the removal of hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (hazardous area). ERRS initiated and completed the removal of non-hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (non-hazardous area).

Additional sumps were installed in Trench Area B and Trench Area D due to excessive free liquids.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations can begin in Trench Area D (pits #1 - 4)

ERRS began and completed excavation to bedrock in Trench Area D (pit# 4). ERRS continued excavation in Trench Area D (pit# 3 and 2). It should be noted that Trench Area D pits# 3 and 2, merge at a point to become one pit. Excavation in the northern section of Trench Area D (pit #2) approached depths of 20 ft, before hitting bedrock and is indicated to be more widespread.

On March 26, 2012, RST performed post confirmation sampling of Trench Area B. Samples were submitted to the USEPA DESA Edison, NJ lab for analysis. Results indicate one small location requires additional excavation (approximately 100 cubic yards).

On March 27, 2012, ERRS received the response for bids for T&D on the hazardous soil (D040). Based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012.

On March 27, 2012, EPA received from the USEPA DESA Edison, NJ Lab, validated results of delineation sampling of Trench Area C. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup criteria for protection of groundwater.

On March 28, 2012, RST performed post confirmation sampling of Trench Area D (pit# 4). Samples were submitted to the USEPA DESA Edison, NJ Lab for analysis. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup criteria for protection of groundwater.

Between March 22, 2012 and April 13, 2012, approximately 4,950 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA. This includes approximately 222.38 tons of reactive sulfide waste. This completes the first subcontract for the removal of non-hazardous soil transportation and disposal (T&D) to the Cumberland County Landfill, Shippensburg, PA.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued on April 11, 2012, to accommodate up to 2,500 additional tons of material with options up to 7,500 tons.

Due to larger than expected volumes above the first contract approval of 5,000 tons, EPA re-bid the non-hazardous soil which was received on April 18, 2012. Checking of CERCLA approval on the low-bidder indicated they were not in compliance. CERCLA approval for the second bidder was received on Monday, April 23, 2012, and forwarded to the contract officer. The contracting officer approved the subcontract for T&D to the Delaware County Solid Waste Authority Rolling Hills Landfill on April 26, 2012. EPA continues to work on the profile acceptance and approval, which may take up to two weeks.

A clarified T&D bid for hazardous soil (D040) was re-issued on March 30, 2012, based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material

requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012. Numerous profile re-vision clarifying underlying hazardous constituents have been provided to the disposal facility to support disposal acceptance. EPA has received approval and has scheduled shipment of the hazardous waste for May 3-4, 2012.

During the week of April 9, 2012, EPA sent representative samples of the "dark green material", uncovered from excavation activities, which is uncharacteristic of the material profiled to-date for analysis. Data should be received on Tuesday, April 17, 2012. This material was segregated from the other non-hazardous waste material until analysis was received.

EPA received, on April 17, 2012, analytical results of the "dark green material", uncovered from excavation activities, which appeared to be uncharacteristic of the material profiled to-date. Data received indicates the material is consistent with the non-hazardous material profiled.

EPA sampled the proposed vendor clean backfill on April 4, 2012, and received data which confirmed they meet EPA standards for clean fill.

2.2.1.1 Planned Response Activities

Continue stockpiling of non-hazardous waste from Trench Area D (pits #1-2).

Continue transportation and disposal of non-hazardous waste to Cumberland County Landfill, Shippensburg, PA.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued to accommodate up to 2,500 additional tons of material with options up to 7,500 tons.

Checking of CERCLA approval on the non-hazardous low-bidder indicated they were not in compliance. CERCLA approval for the second bidder was received on Monday, April 23, 2012, and forwarded to the contract officer. The contracting officer approved the subcontract for T&D to the Delaware County Solid Waste Authority Rolling Hills Landfill on April 26, 2012. EPA continues to work on the profile acceptance and approval, which may take up to two weeks.

Additional results of RST perimeter and site operation air sampling indicate non-detect (@ .5 ug/m3) for volatiles organics along the Site perimeter. Operations (i.e., excavation) air data continue to indicate levels up to 3 ug/m3 for TCE and 20 ug/m3 for total VOCs (chlorobenzene, cis-dichloroethene, xylenes, toluene, etc.).

The ERRS contractor de-mobed from the site on April 25, 2010, and will re-mob on May 2, 2012 in preparation for shipment and off-site disposal of the hazardous waste stream.

2.2.1.2 Next Steps

The Removal Support Team (RST) continues to provide air sampling to monitor site operations, and to take post confirmation soil sampling in all Trench areas excavated.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued to accommodate up to 2,500 additional tons of material with options up to 7,500 tons. It is estimated that an additional 3,000 tons of non-hazardous material has been stockpiled for T&D, with a potential for up to an additional 2,500 tons, at a minimum.

A clarified T&D bid for hazardous soil (D040) was re-issued on March 30, 2012, based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11,

2012. Numerous profile re-visions clarifying underlying hazardous constituents have been provided to the disposal facility to support disposal acceptance. EPA has received approval and has scheduled shipment of the hazardous waste for May 3- 4, 2012.

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2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment

which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

Students from the local Lenape Regional High School, continue to attempt to by-pass the numerous warning signs and barriers to enter the site. The Strike Tem has done a commendable job intercepting the students and explaining the dangers associated with site activities.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & per diem, and materials anticipated for a 3 month operations period and is subject to change. On April 23, 2012, await for restoration removed to cover T&D costs.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received.

On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On April 26, 2012, a contract modification (#4) for a ceiling increase of \$250,000 was received.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$1,650,000.00	\$535,344.00	\$1,114,656.00	67.55%

IAGs	\$20,000.00	\$17,000.00	\$3,000.00	15.00%
TAT/START	\$176,000.00	\$71,296.00	\$104,704.00	59.49%
CLP/Regional Lab	\$100,000.00	\$60,000.00	\$40,000.00	40.00%
Intramural Costs				
Total Site Costs	\$1,946,000.00	\$683,640.00	\$1,262,360.00	64.87%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health

& safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Mansfield Trail Dump Site - Removal Polrep



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II**

Subject: POLREP #14
Progress
Mansfield Trail Dump Site
38
Stanhope, NJ
Latitude: 40.9289443 Longitude: -74.6995999

To: Judith Enck, USEPA Region 2 - RA
Lisa Plevin, USEPA Region 2 -
Joe Rotola, USEPA Region 2, ERRD-RAB
Dan Harkay, USEPA Region 2 ERRD-RAB
Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB
Pat Seppi, U.S. EPA Region 2
George Zachos, USEPA Region 2
Bob McKnight, USEPA Region 2 ERRD-NJB
Mark Herzberg, NJDEP
Beckett Grealish, USEPA Region 2 ERRD-RAB
Fred Mumford, NJDEP - BEMSA

From: Louis DiGuardia, On-Scene Coordinator

Date: 5/11/2012

Reporting Period: 5/2/2012 - 5/11/2012

1. Introduction

1.1 Background

Site Number:	38	Contract Number:	EP-S2-10-03
D.O. Number:	0042	Action Memo Date:	9/29/2011
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	NPL	Operable Unit:	01
Mobilization Date:	1/31/2012	Start Date:	10/20/2011
Demob Date:		Completion Date:	
CERCLIS ID:	NJN000206345	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byram Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B, C, D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in May 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 – 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at <http://epaossc.org/mansfieldtraildump>

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447

square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access agreements, ER has been tasked to provide and maintain site setup and mobilization of support equipment.

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
- 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
- 7) Refueling of any vehicle is prohibited on the ROW / easement;
- 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC and Community Involvement Coordinator was interviewed by the New Jersey Newspaper Star Ledger on site activities. The article was in the March 18, 2012, Sunday edition.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas A (Upper and Lower), B, C and E. Cleared debris around Trench area D.

EPA completed the construction of access roads to Areas A, B, C, and E. Area E has been prepared as a staging area for the stockpiling of material due to limited staging area in Area A.

Completed representative disposal sampling in Trench areas A, B, C, and E.

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

Notification was provided to PSE&G on EPA beginning activities in Trench area D, within and underneath the 500kV transmission line, as per the access agreement. With the receipt of all specialized grounding equipment and access, representative disposal samples and depth estimates were taken from all pits (#1 - 4) in Trench Area D.

With the receipt of all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were prepared and issued on March 9, 2012. Award for the non-hazardous T&D was awarded on March 16, 2012, dependent on off-site compliance approval. A CERCLA compliance check was approved for the Cumberland County Landfill, Shippensburg, PA, for non-hazardous soil on March 16, 2012.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On March 15, 2012, EPA-RAB (Greg DeAngelos) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

RST collected post confirmation samples from Trench Area A (Lower & Upper) on March 15 - 16, 2012.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations began in Trench Area D (pits #1 - 4)

Results of RST perimeter and site operation air sampling taken on March 14, 2012, indicate non-detect (@ .5 ug/m³) for volatiles organics along the perimeter and < 1 ug/m³ for site operations.

Between March 22, 2012 and April 13, 2012, approximately 4,950 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA. This includes approximately 222.38 tons of reactive sulfide waste.

On March 30, 2012, a clarified T&D bid for hazardous soil (D040) was re-issued based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012. Numerous profile re-visions clarifying underlying hazardous constituents have been provided to the disposal facility to support disposal acceptance. EPA anticipates approval the week of April 23, 2012.

During the week of April 9, 2012, EPA sent representative samples of the "dark green material", uncovered from excavation activities, which is uncharacteristic of the material profiled to-date for analysis. Data should be received on Tuesday, April 17, 2012. This material was segregated from the other non-hazardous waste material until analysis was received.

EPA received on April 17, 2012, analytical results of the "dark green material", uncovered from excavation activities, which appeared to be uncharacteristic of the material profiled to-date. Data received indicates the material is consistent with the non-hazardous material profiled to-date.

The U.S. Coast Guard Strike Team (Strike Team) continues to provide air monitoring, health & safety and security support for site operations. Air monitoring instrumentation continues to be set-up between site operation areas and residential structures to monitor the potential for air releases during site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Contaminated soil (non-hazardous)	soil	4,950 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (reactive sulfide)	soil	222.38 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (non-hazardous)	soil	6,400 tons	N/A	N/A	Rolling Hills Landfill Boyertown, PA
Contaminated soil (hazardous - 040)	soil	22.91 tons	008772733JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	sol	24.78 tons	008772734JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	24.32 tons	008772735JJK	Not required	Wayne Disposal Inc. Belleville, MI

Contaminated soil (hazardous - 040)	soil	25.71 tons	008772736JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	25.48 tons	008772737JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	25.21 tons	008772738JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	22.36 tons	008772739JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	24.00 tons	005233073JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	24.00 tons	005233074JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	25.59 tons	008772728JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	30.49 tons	008772729JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	27.34 tons	008772730JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	25.94 tons	008772731JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	25.06 tons	008772732JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	23.94 tons	005233070JJK	Required	Michigan Disposal, Inc. Belleville, MI

2.2 Planning Section

2.2.1 Anticipated Activities

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

With the receipt of a ceiling increase and all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request was awarded to the Cumberland County Landfill, Shippensburg, PA. CERCLA compliance approval was received for the facility.

ERRS initiated and completed the removal of hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (hazardous area). ERRS initiated and completed the removal of non-hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (non-hazardous area).

Additional sumps were installed in Trench Area B and Trench Area D due to excessive free liquids.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations can begin in Trench Area D (pits #1 - 4)

ERRS began and completed excavation to bedrock in Trench Area D (pit# 4). ERRS continued excavation in Trench Area D (pit# 3 and 2). It should be noted that Trench Area D pits# 3 and 2, merge at a point to become one pit. Excavation in the northern section of Trench Area D (pit #2) approached depths of 20 ft, before hitting bedrock and is indicated to be more widespread.

On March 26, 2012, RST performed post confirmation sampling of Trench Area B. Samples were submitted to the USEPA DESA Edison, NJ lab for analysis. Results indicate one small location requires additional excavation (approximately 100 cubic yards).

On March 27, 2012, ERRS received the response for bids for T&D on the hazardous soil (D040). Based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012.

On March 27, 2012, EPA received from the USEPA DESA Edison, NJ Lab, validated results of delineation sampling of Trench Area C. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup criteria for protection of groundwater.

On March 28, 2012, RST performed post confirmation sampling of Trench Area D (pit# 4). Samples were submitted to the USEPA DESA Edison, NJ Lab for analysis. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup criteria for protection of groundwater.

Between March 22, 2012 and April 13, 2012, approximately 4,950 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA. This includes approximately 222.38 tons of reactive sulfide waste. This completes the first subcontract for the removal of non-hazardous soil transportation and disposal (T&D) to the Cumberland County Landfill, Shippensburg, PA.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued on April 11, 2012, to accommodate up to 2,500 additional tons of material with options up to 7,500 tons.

Due to larger than expected volumes above the first contract approval of 5,000 tons, EPA re-bid the non-hazardous soil which was received on April 18, 2012. Checking of CERCLA approval on the low-bidder indicated they were not in compliance. CERCLA approval for the second bidder was received on Monday, April 23, 2012, and forwarded to the contract officer. The contracting officer approved the subcontract for T&D to the Delaware County Solid Waste Authority Rolling Hills Landfill on April 26, 2012. EPA continues to work on the profile acceptance and approval, which may take up to two weeks.

A clarified T&D bid for hazardous soil (D040) was re-issued on March 30, 2012, based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012. Numerous profile re-vision clarifying underlying hazardous constituents have been provided to the disposal facility to support disposal acceptance. EPA has received approval and has scheduled shipment of the hazardous waste for May 3- 4, 2012.

During the week of April 9, 2012, EPA sent representative samples of the "dark green material", uncovered from excavation activities, which is uncharacteristic of the material profiled to-date for analysis. Data should be received on Tuesday, April 17, 2012. This material was segregated from the other non-hazardous waste material until analysis was received.

EPA received, on April 17, 2012, analytical results of the "dark green material", uncovered from excavation activities, which appeared to be uncharacteristic of the material profiled to-date. Data received indicates the material is consistent with the non-hazardous material profiled.

EPA sampled the proposed vendor clean backfill on April 4, 2012, and received data which confirmed they meet EPA standards for clean fill.

Continued results of RST perimeter and site operation air sampling indicate non-detect (@ .5 ug/m³) for volatiles organics along the Site perimeter. Operations (i.e., excavation) air data continue to indicate levels up to 3 ug/m³ for TCE and 20 ug/m³ for total VOCs (chlorobenzene, cis-dichloroethene, xylenes, toluene, etc.).

2.2.1.1 Planned Response Activities

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread.

During the period between May 3 and May 4, 2012, approximately 195 tons of hazardous material (not requiring treatment) was shipped to Wayne Disposal, Inc., Belleville, MI for disposal.

On May 4, 2012, approximately 158.72 tons of hazardous material (requiring treatment) was shipped to Michigan Disposal, Inc., Belleville, MI for treatment and disposal.

During the period between May 7 and May 11, 2012, approximately 3,354 tons of non-hazardous material was shipped to the Rollings Hills Landfill, Boyertown, PA.

On Friday, May 11, 2012, during backfilling and re-grading operations of Trench D with a dozer, material was found seeping to the surface in the extreme northern portion of Trench D. A narrow trench (< 6 ft wide) was found with deteriorated drums which continued to the tree line. With the removal of this material, EPA anticipates this will complete excavation activities in Trench D.

2.2.1.2 Next Steps

Continue T&D of non-hazardous material to the Rollings Hills Landfill, Boyertown, PA.

Re-grading and restoration activities continue in all trenches completed.

The Removal Support Team (RST) continues to provide air sampling to monitor site operations, and to take post confirmation soil sampling in all Trench areas excavated, where feasible (i.e., bedrock).

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment

which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

Students from the local Lenape Regional High School, continue to attempt to by-pass the numerous warning signs and barriers to enter the site. The Strike Team has done a commendable job intercepting the students and explaining the dangers associated with site activities.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & per diem, materials anticipated for a 3 month operations period and T&D, which is subject to change.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received.

On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On April 26, 2012, a contract modification (#4) for a ceiling increase of \$250,000 was received.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$1,650,000.00	\$755,344.00	\$894,656.00	54.22%
IAGs	\$20,000.00	\$17,000.00	\$3,000.00	15.00%
TAT/START	\$176,000.00	\$81,296.00	\$94,704.00	53.81%
CLP/Regional Lab	\$100,000.00	\$60,000.00	\$40,000.00	40.00%
Intramural Costs				
Total Site Costs	\$1,946,000.00	\$913,640.00	\$1,032,360.00	53.05%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4. Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

**U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Mansfield Trail Dump Site - Removal Polrep**



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II**

Subject: POLREP #15
Progress
Mansfield Trail Dump Site
38
Stanhope, NJ
Latitude: 40.9289443 Longitude: -74.6995999

To: Judith Enck, USEPA Region 2 - RA
Lisa Plevin, USEPA Region 2 -
Joe Rotola, USEPA Region 2, ERRD-RAB
Dan Harkay, USEPA Region 2 ERRD-RAB
Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB
Pat Seppi, U.S. EPA Region 2
George Zachos, USEPA Region 2
Bob McKnight, USEPA Region 2 ERRD-NJB
Mark Herzberg, NJDEP
Beckett Grealish, USEPA Region 2 ERRD-RAB
Fred Mumford, NJDEP - BEMSA

From: Louis DiGuardia, On-Scene Coordinator

Date: 5/25/2012

Reporting Period: 5/14/2012 - 5/25/2012

1. Introduction

1.1 Background

Site Number:	38	Contract Number:	EP-S2-10-03
D.O. Number:	0042	Action Memo Date:	9/29/2011
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	NPL	Operable Unit:	01
Mobilization Date:	1/31/2012	Start Date:	10/20/2011
Demob Date:		Completion Date:	
CERCLIS ID:	NJN000206345	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byram Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B, C, D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in May 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 – 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at <http://epaossc.org/mansfieldtraildump>

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447

square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access agreements, ER has been tasked to provide and maintain site setup and mobilization of support equipment.

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;

2) All work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;

3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;

4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;

5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;

6) The project contractor shall be liable to pay for any damages to the transmission facilities;

7) Refueling of any vehicle is prohibited on the ROW / easement;

8) Flammable liquids or gases shall not be stored on the ROW / easement;

9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC and Community Involvement Coordinator was interviewed by the New Jersey Newspaper Star Ledger on site activities. The article was in the March 18, 2012, Sunday edition.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas A (Upper and Lower), B, C and E. Cleared debris around Trench area D.

EPA completed the construction of access roads to Areas A, B, C, and E. Area E has been prepared as a staging area for the stockpiling of material due to limited staging area in Area A.

Completed representative disposal sampling in Trench areas A, B, C, and E.

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

Notification was provided to PSE&G on EPA beginning activities in Trench area D, within and underneath the 500kV transmission line, as per the access agreement. With the receipt of all specialized grounding equipment and access, representative disposal samples and depth estimates were taken from all pits (#1 - 4) in Trench Area D.

With the receipt of all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were prepared and issued on March 9, 2012. Award for the non-hazardous T&D was awarded on March 16, 2012, dependent on off-site compliance approval. A CERCLA compliance check was approved for the Cumberland County Landfill, Shippensburg, PA, for non-hazardous soil on March 16, 2012.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

RST collected post confirmation samples from Trench Area A (Lower & Upper) on March 15 - 16, 2012.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations began in Trench Area D (pits #1 - 4)

Results of RST perimeter and site operation air sampling taken on March 14, 2012, indicate non-detect (@ .5 ug/m³) for volatiles organics along the perimeter and < 1 ug/m³ for site operations.

Between March 22, 2012 and April 13, 2012, approximately 4,950 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA. This includes approximately 222.38 tons of reactive sulfide waste.

On March 30, 2012, a clarified T&D bid for hazardous soil (D040) was re-issued based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012. Numerous profile re-visions clarifying underlying hazardous constituents have been provided to the disposal facility to support disposal acceptance. EPA anticipates approval the week of April 23, 2012.

During the week of April 9, 2012, EPA sent representative samples of the "dark green material", uncovered from excavation activities, which is uncharacteristic of the material profiled to-date for analysis. Data should be received on Tuesday, April 17, 2012. This material was segregated from the other non-hazardous waste material until analysis was received.

EPA received on April 17, 2012, analytical results of the "dark green material", uncovered from excavation activities, which appeared to be uncharacteristic of the material profiled to-date. Data received indicates the material is consistent with the non-hazardous material profiled to-date.

The U.S. Coast Guard Strike Team (Strike Team) continues to provide air monitoring, health & safety and security support for site operations. Air monitoring instrumentation continues to be set-up between site operation areas and residential structures to monitor the potential for air releases during site activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Contaminated soil (non-hazardous)	soil	4,950 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (reactive sulfide)	soil	222.38 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (non-hazardous)	soil	6,174 tons	N/A	N/A	Rolling Hills Landfill Boyertown, PA
Contaminated soil (hazardous - 040)	soil	22.91 tons	008772733JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	sol	24.78 tons	008772734JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	24.32 tons	008772735JJK	Not required	Wayne Disposal Inc. Belleville, MI

Contaminated soil (hazardous - 040)	soil	25.71 tons	008772736JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	25.48 tons	008772737JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	25.21 tons	008772738JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	22.36 tons	008772739JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	24.00 tons	005233073JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	24.00 tons	005233074JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	25.59 tons	008772728JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	30.49 tons	008772729JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	27.34 tons	008772730JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	25.94 tons	008772731JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	25.06 tons	008772732JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	23.94 tons	005233070JJK	Required	Michigan Disposal, Inc. Belleville, MI

2.2 Planning Section

2.2.1 Anticipated Activities

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

With the receipt of a ceiling increase and all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request was awarded to the Cumberland County Landfill, Shippensburg, PA. CERCLA compliance approval was received for the facility.

ERRS initiated and completed the removal of hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (hazardous area). ERRS initiated and completed the removal of non-hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (non-hazardous area).

Additional sumps were installed in Trench Area B and Trench Area D due to excessive free liquids.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations can begin in Trench Area D (pits #1 - 4)

ERRS began and completed excavation to bedrock in Trench Area D (pit# 4). ERRS continued excavation in Trench Area D (pit# 3 and 2). It should be noted that Trench Area D pits# 3 and 2, merge at a point to become one pit. Excavation in the northern section of Trench Area D (pit #2) approached depths of 20 ft, before hitting bedrock and is indicated to be more widespread.

On March 26, 2012, RST performed post confirmation sampling of Trench Area B. Samples were submitted to the USEPA DESA Edison, NJ lab for analysis. Results indicate one small location requires additional excavation (approximately 100 cubic yards).

On March 27, 2012, ERRS received the response for bids for T&D on the hazardous soil (D040). Based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012.

On March 27, 2012, EPA received from the USEPA DESA Edison, NJ Lab, validated results of delineation sampling of Trench Area C. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup criteria for protection of groundwater.

On March 28, 2012, RST performed post confirmation sampling of Trench Area D (pit# 4). Samples were submitted to the USEPA DESA Edison, NJ Lab for analysis. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup criteria for protection of groundwater.

Between March 22, 2012 and April 13, 2012, approximately 4,950 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA. This includes approximately 222.38 tons of reactive sulfide waste. This completes the first subcontract for the removal of non-hazardous soil transportation and disposal (T&D) to the Cumberland County Landfill, Shippensburg, PA.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued on April 11, 2012, to accommodate up to 2,500 additional tons of material with options up to 7,500 tons.

Due to larger than expected volumes above the first contract approval of 5,000 tons, EPA re-bid the non-hazardous soil which was received on April 18, 2012. Checking of CERCLA approval on the low-bidder indicated they were not in compliance. CERCLA approval for the second bidder was received on Monday, April 23, 2012, and forwarded to the contract officer. The contracting officer approved the subcontract for T&D to the Delaware County Solid Waste Authority Rolling Hills Landfill on April 26, 2012. EPA continues to work on the profile acceptance and approval, which may take up to two weeks.

A clarified T&D bid for hazardous soil (D040) was re-issued on March 30, 2012, based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012. Numerous profile re-vision clarifying underlying hazardous constituents have been provided to the disposal facility to support disposal acceptance. EPA has received approval and has scheduled shipment of the hazardous waste for May 3- 4, 2012 to Wayne Disposal, Inc., Belleville, MI. for hazardous waste (not requiring treatment), and Michigan Disposal, Inc., Belleville, MI (requiring treatment before disposal).

During the week of April 9, 2012, EPA sent representative samples of the "dark green material", uncovered from excavation activities, which is uncharacteristic of the material profiled to-date for

analysis. Data should be received on Tuesday, April 17, 2012. This material was segregated from the other non-hazardous waste material until analysis was received.

EPA received, on April 17, 2012, analytical results of the "dark green material", uncovered from excavation activities, which appeared to be uncharacteristic of the material profiled to-date. Data received indicates the material is consistent with the non-hazardous material profiled.

EPA sampled the proposed vendor clean backfill on April 4, 2012, and received data which confirmed they meet EPA standards for clean fill. Re-analysis was requested by the Site RPM due to slightly elevated arsenic levels.

Continued results of RST perimeter and site operation air sampling indicate non-detect (@ .5 ug/m3) for volatiles organics along the Site perimeter. Operations (i.e., excavation) air data continue to indicate levels up to 3 ug/m3 for TCE and 20 ug/m3 for total VOCs (chlorobenzene, cis-dichloroethene, xylenes, toluene, etc.).

2.2.1.1 Planned Response Activities

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas have indicated contamination at depths approaching 20 ft. to bedrock, and being more widespread.

During the period between May 3 and May 4, 2012, approximately 195 tons of hazardous material (not requiring treatment) was shipped to Wayne Disposal, Inc., Belleville, MI, for disposal. This completes T&D of this waste stream.

On May 4, 2012, approximately 158.72 tons of hazardous material (requiring treatment) was shipped to Michigan Disposal, Inc., Belleville, MI, for treatment and disposal. This completes T&D of this waste stream.

During the period between May 7 and May 18, 2012, approximately 6,400 tons of non-hazardous material was shipped to the Rollings Hills Landfill, Boyertown, PA. This completes T&D of this waste stream.

On Friday, May 11, 2012, during backfilling and re-grading operations of Trench D with a dozer, material was found seeping to the surface in the extreme northern portion of Trench D. A narrow trench (< 6 ft wide) was found with deteriorated drums which continued to the tree line. Excavation of soil in Trench Area D was completed on May 15, 2012.

2.2.1.2 Next Steps

T&D of non-hazardous material to the Rollings Hills Landfill, Boyertown, PA, was completed on May 18, 2012.

Re-grading and restoration activities continue in all trenches areas.

With the completion of excavation and T&D activities, EPA closed out all air sampling operations.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment

which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

As per the access agreement with PSE&G, all work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project.

Students from the local Lenape Regional High School, continue to attempt to by-pass the

numerous warning signs and barriers to enter the site. The Strike Team has done a commendable job intercepting the students and explaining the dangers associated with site activities.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & per diem, materials anticipated for a 3 month operations period and T&D, which is subject to change.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received.

On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On April 26, 2012, a contract modification (#4) for a ceiling increase of \$250,000 was received.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$1,650,000.00	\$755,344.00	\$894,656.00	54.22%
IAGs	\$20,000.00	\$18,000.00	\$2,000.00	10.00%
TAT/START	\$176,000.00	\$86,006.00	\$89,994.00	51.13%
CLP/Regional Lab	\$100,000.00	\$60,000.00	\$40,000.00	40.00%
Intramural Costs				
Total Site Costs	\$1,946,000.00	\$919,350.00	\$1,026,650.00	52.76%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to

have an informative and complaint-free project.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

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The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

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7. Situational Reference Materials

No information available at this time.

**U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Mansfield Trail Dump Site - Removal Polrep
Final Removal Polrep**



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II**

Subject: POLREP #16
Final
Mansfield Trail Dump Site
38
Stanhope, NJ
Latitude: 40.9289443 Longitude: -74.6995999

To: Joe Rotola, USEPA Region 2, ERRD-RAB
Dan Harkay, USEPA Region 2 ERRD-RAB
Kristin Giacalone, U.S. EPA Region 2 ERRD-NJRB
Pat Seppi, U.S. EPA Region 2
George Zachos, USEPA Region 2
Bob McKnight, USEPA Region 2 ERRD-NJB
Mark Herzberg, NJDEP
Beckett Grealish, USEPA Region 2 ERRD-RAB

From: Louis DiGuardia, On-Scene Coordinator

Date: 8/28/2012

Reporting Period: June 1, 2012 - August 28, 2012

1. Introduction

1.1 Background

Site Number:	38	Contract Number:	EP-S2-10-03
D.O. Number:	0042	Action Memo Date:	9/29/2011
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	NPL	Operable Unit:	01
Mobilization Date:	1/31/2012	Start Date:	10/20/2011
Demob Date:		Completion Date:	7/23/2012
CERCLIS ID:	NJN000206345	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

A Time-Critical Removal Action for the excavation of contaminated soil in former waste disposal areas (i.e., trenches) that is contaminated with volatile organic contaminants (VOCs), specifically trichloroethylene (TCE).

1.1.2 Site Description

The Mansfield Trail Dump Site (Site) is located between County Road 605 and Brookwood Road in Byran Township, Sussex County, New Jersey. It is suspected that the Site was used as a dump for septic wastes from the late 1950s through at least the early 1970s. Most of the waste disposal appears

to have taken place in trenches, although other portions of the Site are also suspected to have been used. Land ownership in the area of dumping, both past and present, is by private entities.

The disposal trenches at the Site were first identified in 2009 by the NJDEP during an effort to identify the source of TCE contamination in the nearby residential wells along Brookwood and Ross Roads. Subsequent reconnaissance efforts conducted by NJDEP and EPA in December 2009 and May 2010 indicated the following: Dump Area A consists of two trenches located on a ridgeline that trends southwest to northeast, directly upslope of and overlooking the Brookwood and Ross Roads neighborhood to the west, while Dump Areas B, C, D, and E are situated on the east side of the ridge. The Dump Area A lower trench is approximately 120 feet long and 10 feet wide. Preliminary measurements indicated that the upper trench is approximately 35 feet in length and 10 feet wide. However a review of historic aerial photos and additional reconnaissance efforts in May 2010 indicated that it is approximately the same length as the lower trench. Dump Area B consists of a single trench approximately 132 feet long and 15 feet wide. Dump Area C consists of an open, roughly circular patch of undisturbed vegetation approximately 140 feet in diameter adjacent to Dump Area B. Dump Area D was first thought to consist of a single trench approximately 60 feet long and 20 feet wide. However, a subsequent review of historic aerial photos and additional reconnaissance efforts on May 2010 indicated that Dump Area D consists of four trenches (designated as Trench Nos. 1 – 4), with the original location an extension of Trench 1. Dump Area E, first observed during the May 2010 reconnaissance, was found to consist of four parallel mounds which are likely to be small berms surrounding the trenches. This is the first EPA removal action conducted at the Site.

EPA continues to conduct work at the Mansfield Trail Dump Superfund Site, and more information can be found at <http://epaossc.org/mansfieldtraildump>

1.1.2.1 Location

The Mansfield Trail Dump Site is located along a wooded ridge situated between County Road 605 and Brookwood Road, just beyond a closed overpass in Byram Township, Sussex County, New Jersey.

1.1.2.2 Description of Threat

TCE contaminated waste and soil from the former waste disposal areas (i.e., trenches). The contaminated waste and soil present within these areas is a continual source of VOC contamination that is recharging to the underlying aquifer and presents a direct contact threat to the public. CERCLA hazardous substances, many of them known or suspected carcinogens, have migrated from the former disposal areas into the shallow ground water at the Site above Removal Action Levels (RALs) and have impacted near-by residential wells above Federal Maximum Contaminant Levels (MCLs). The groundwater flow in this area is complex, and the plume emanating from the Site is undefined and could potentially impact other potable wells in the area.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In the first half of 2010, EPA personnel and contractor representatives from the Site Assessment Team (SAT) conducted several sampling events at the Site to support an Integrated Assessment (IA). While at the site, and with the assistance of historical aerial photographs obtained by the EPA National Exposure Research Laboratory (NERL), several more trenches and other potential disposal areas were identified throughout the Site.

As a result, it was confirmed that Dump Area A consists of two trenches. The upper trench and lower trench cover approximately 1,337 square feet and 1,298 square feet in area, respectively. Based on the aerial photographic analysis, this area was subsequently partially covered with an estimated 600 cubic yards of fill material. Dump Area B consists of a trench (or low-lying area) that is bermed on three sides and covers approximately 2,256 square feet in area. Dump Area C, as identified by the NJDEP, and which appears to be an open, grassy wetland and covers approximately 6,240 square feet in area, was not included as a waste disposal area at this time. Dump Area D currently consists of an estimated four trenches. Beginning on the eastern edge of Dump Area D, Trench No. 1 is estimated to cover 10,447 square feet in area; Trench No. 2 approximately 1,593 square feet in area; Trench No. 3 approximately 2,415 square feet in area; and Trench No. 4 approximately 3,930 square feet in area. Based on the aerial photographic analysis, Dump Area D may have originally consisted of a different arrangement and number of trenches than is currently evident. As such, it is difficult to estimate the volume of fill used in this area. Dump Area E, a heavily vegetated, low-lying area in the southeastern portion of the Site, consists of the remnants of an estimated three trenches. It is located between Dump Areas B and D. The three trenches lie close to each other and have become almost unidentifiable since it is believed that

this area was either filled in or collapsed over time due to flooding. It is estimated that Dump Area E may have covered approximately 3,280 square feet in area. Based on the aerial photographic analysis, the general area around Dump Area E was subsequently covered with an estimated 4,500 cubic yards of fill material.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The ERRS contractor, Environmental Restoration, LLC (ER) has been activated for the Time-Critical Removal Action to excavate TCE contaminated soil from a number of trenches. EPA OSC discusses operational activities with ERRS contractor on a daily basis. With receipt of all access agreements, ER has been tasked to provide and maintain site setup and mobilization of support equipment.

EPA has received access from the two property owners, and Sussex County Engineering (agent for New Jersey Department of Transportation/New Jersey Transit (NJDOT)) with acceptance of plans for road access.

EPA received a response from Public Service Electric & Gas (PSE&G) in attempts to obtain access to the Right-of-Way (ROW) to excavate in trenches directly beneath their 500kV transmission line. PSE&G has submitted a number of conditions as part of the agreement for access, which include the following:

- 1) No grade changes will be permitted on the ROW/ easement due to any construction unless approved by PSE&G. Any excavated soil that will not be re-used shall be trucked off the right-of-way immediately, with the exception of roadway improvements;
- 2) All work on the ROW shall be subject to the approval of the Manager – Electric Transmission Construction and Maintenance. Two weeks notice shall be provided prior to the start of any work by calling 908-412-7001, under the condition this does not cause undue delay in EPA's project;
- 3) The applicant shall be knowledgeable of the State of New Jersey Statute, National Electrical Safety Code (NESC) and OSHA regulation 1910.333 pertinent to working in close proximity to energized conductors. Since the transmission line sag varies with electrical loading, the contractor must monitor the transmission lines on a continuing basis to verify that proper clearance is maintained to equipment being operated within the right of way;
- 4) Should any problems of ponding or drainage arise as a result of EPA and authorized contractor's use of this property, beyond pre-existing conditions, EPA or its authorized contractors at no cost to PSE&G shall correct it;
- 5) Stockpiling of debris, fill or excavated materials and unattended parking of vehicles or equipment on the ROW / easement are prohibited;
- 6) The project contractor shall be liable to pay for any damages to the transmission facilities;
- 7) Refueling of any vehicle is prohibited on the ROW / easement;
- 8) Flammable liquids or gases shall not be stored on the ROW / easement;
- 9) Access to PSE&G facilities shall be available at all times, electric transmission work shall take precedence over all third party activities.

2.1.2 Response Actions to Date

EPA held a public availability session and public meeting on December 8, 2011, at the Byram Township Town hall.

On December 11, 2011, EPA completed the Administrative Record for the time-critical removal action for the Mansfield Trail Dump Site, which was submitted to the Sussex County Library.

The access agreement with PSE&G to obtain access to the ROW to excavate in trenches directly

beneath their 500kV transmission line, was signed on January 31, 2012. With this agreement in place, EPA authorized the mobilization of support equipment by the ERRS contractor, ER to the Site.

EPA OSC continues to work with the EPA Community Involvement Coordinator to support the development of a local Community Advisory Group (CAG) to keep the public informed and involved on all of EPA's activities for the Mansfield Trail Dump Site.

On February 2, 2012, the EPA OSC and Community Involvement Coordinator was interviewed by the New Jersey Newspaper Star Ledger on site activities. The article was in the March 18, 2012, Sunday edition.

EPA has completed the preparation of site plans (i.e., work plan, Health & Safety (HASP), etc.) and mobilization of equipment. EPA has completed the construction of approximately 500 ft. of staging road for disposal transportation vehicles due to limited working area on the Site and the limitations working in close proximity of the 500kV transmission line. EPA completed the posting of warning signs and began limiting entry to the Site from all access points, i.e., bike and walking trails.

Clearing (i.e., trees) and grubbing to the contaminated trenches was completed in Trench areas A (Upper and Lower), B, C and E. Cleared debris around Trench area D.

EPA completed the construction of access roads to Areas A, B, C, and E. Area E has been prepared as a staging area for the stockpiling of material due to limited staging area in Area A.

Completed representative disposal sampling in Trench areas A, B, C, and E.

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

Notification was provided to PSE&G on EPA beginning activities in Trench area D, within and underneath the 500kV transmission line, as per the access agreement. With the receipt of all specialized grounding equipment and access, representative disposal samples and depth estimates were taken from all pits (#1 - 4) in Trench Area D.

With the receipt of all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request for bids were prepared and issued on March 9, 2012. Award for the non-hazardous T&D was awarded on March 16, 2012, dependent on off-site compliance approval. A CERCLA compliance check was approved for the Cumberland County Landfill, Shippensburg, PA, for non-hazardous soil on March 16, 2012.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received. On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On March 15, 2012, EPA-RAB (Greg DeAngelos) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

RST collected post confirmation samples from Trench Area A (Lower & Upper) on March 15 - 16, 2012.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations began in Trench Area D (pits #1 - 4).

Results of RST perimeter and site operation air sampling taken on March 14, 2012, indicate non-detect (@ .5 ug/m³) for volatiles organics along the perimeter and < 1 ug/m³ for site operations.

Between March 22, 2012 and April 13, 2012, approximately 4,950 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA. This includes approximately 222.38 tons of reactive sulfide waste.

On March 30, 2012, a clarified T&D bid for hazardous soil (D040) was re-issued based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed

facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012. Numerous profile re-visions clarifying underlying hazardous constituents have been provided to the disposal facility to support disposal acceptance. EPA anticipates approval the week of April 23, 2012.

During the week of April 9, 2012, EPA sent representative samples of the "dark green material", uncovered from excavation activities, which is uncharacteristic of the material profiled to-date for analysis. Data should be received on Tuesday, April 17, 2012. This material was segregated from the other non-hazardous waste material until analysis was received.

EPA received on April 17, 2012, analytical results of the "dark green material", uncovered from excavation activities, which appeared to be uncharacteristic of the material profiled to-date. Data received indicates the material is consistent with the non-hazardous material profiled to-date.

ERRS continued excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas have indicated contamination at depths approaching 20 ft. to bedrock, and being more widespread.

During the period between May 3 and May 4, 2012, approximately 195 tons of hazardous material (not requiring treatment) was shipped to Wayne Disposal, Inc., Belleville, MI, for disposal. This completes T&D of this waste stream.

On May 4, 2012, approximately 158.72 tons of hazardous material (requiring treatment) was shipped to Michigan Disposal, Inc., Belleville, MI, for treatment and disposal. This completes T&D of this waste stream.

During the period between May 7 and May 18, 2012, approximately 6,400 tons of non-hazardous material was shipped to the Rollings Hills Landfill, Boyertown, PA. This completes T&D of this waste stream.

On Friday, May 11, 2012, during backfilling and re-grading operations of Trench D with a dozer, material was found seeping to the surface in the extreme northern portion of Trench D. A narrow trench (< 6 ft wide) was found with deteriorated drums which continued to the tree line. Excavation of soil in Trench Area D was completed on May 15, 2012.

Re-grading and restoration activities continued in all trenches areas.

With the completion of excavation and T&D activities, EPA closed out all air sampling operations.

The U.S. Coast Guard Strike Team (Strike Team) completed their duties of air monitoring, health & safety and security support for site operations.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

An investigation to identify the parties responsible for the contamination is underway. EPA will issue notice and requests for information letters and offer Potentially Responsible Parties (PRPs) the opportunity to conduct this removal action.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Contaminated soil (non-hazardous)	soil	4,950 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (reactive sulfide)	soil	222.38 tons	N/A	N/A	Cumberland Co. Landfill Shippensburg, PA
Contaminated soil (non-hazardous)	soil	6,174 tons	N/A	N/A	Rolling Hills Landfill Boyertown, PA

Contaminated soil (hazardous - 040)	soil	22.91 tons	008772733JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	sol	24.78 tons	008772734JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	24.32 tons	008772735JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	25.71 tons	008772736JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	25.48 tons	008772737JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	25.21 tons	008772738JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	22.36 tons	008772739JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	24.00 tons	005233073JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	24.00 tons	005233074JJK	Not required	Wayne Disposal Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	25.59 tons	008772728JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	30.49 tons	008772729JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	27.34 tons	008772730JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	25.94 tons	008772731JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	25.06 tons	008772732JJK	Required	Michigan Disposal, Inc. Belleville, MI
Contaminated soil (hazardous - 040)	soil	23.94 tons	005233070JJK	Required	Michigan Disposal, Inc. Belleville, MI

2.2 Planning Section

2.2.1 Anticipated Activities

Results of surveying of the height of the transmission line to verify that proper clearance is maintained for equipment has been completed and has verified that we are within the limitations (>25 ft) for working under the 500kV transmission line.

With the receipt of a ceiling increase and all analytical from Trenches A, B, C, D and E, non-hazardous transportation & disposal request was awarded to the Cumberland County Landfill, Shippensburg, PA.

CERCLA compliance approval was received for the facility.

ERRS initiated and completed the removal of hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (hazardous area). ERRS initiated and completed the removal of non-hazardous soil from Trench A (upper and lower) and stockpiled in Trench area E (non-hazardous area).

Additional sumps were installed in Trench Area B and Trench Area D due to excessive free liquids.

On March 16, 2012, EPA received notification from PSE&G on EPA's operating setup (as per the access agreement). With the receipt of all specialized grounding equipment and access, excavation operations can begin in Trench Area D (pits #1 - 4).

ERRS began and completed excavation to bedrock in Trench Area D (pit# 4). ERRS continued excavation in Trench Area D (pit# 3 and 2). It should be noted that Trench Area D pits# 3 and 2, merge at a point to become one pit. Excavation in the northern section of Trench Area D (pit #2) approached depths of 20 ft, before hitting bedrock and is indicated to be more widespread.

On March 26, 2012, RST performed post confirmation sampling of Trench Area B. Samples were submitted to the USEPA DESA Edison, NJ lab for analysis. Results indicate one small location requires additional excavation (approximately 100 cubic yards).

On March 27, 2012, ERRS received the response for bids for T&D on the hazardous soil (D040). Based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012.

On March 27, 2012, EPA received from the USEPA DESA Edison, NJ Lab, validated results of delineation sampling of Trench Area C. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup criteria for protection of groundwater.

On March 28, 2012, RST performed post confirmation sampling of Trench Area D (pit# 4). Samples were submitted to the USEPA DESA Edison, NJ Lab for analysis. Results indicate no contamination is present above the New Jersey Department of Protection (NJDEP) soil cleanup criteria for protection of groundwater.

Between March 22, 2012 and April 13, 2012, approximately 4,950 tons of non-hazardous soil was shipped to the Cumberland County Landfill, Shippensburg, PA. This includes approximately 222.38 tons of reactive sulfide waste. This completes the first subcontract for the removal of non-hazardous soil transportation and disposal (T&D) to the Cumberland County Landfill, Shippensburg, PA.

ERRS will continue excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas indicate contamination at depths approaching 20 ft. to bedrock, and being more widespread. Based upon this information, the non-hazardous T&D bid was re-issued on April 11, 2012, to accommodate up to 2,500 additional tons of material with options up to 7,500 tons.

Due to larger than expected volumes above the first contract approval of 5,000 tons, EPA re-bid the non-hazardous soil which was received on April 18, 2012. Checking of CERCLA approval on the low-bidder indicated they were not in compliance. CERCLA approval for the second bidder was received on Monday, April 23, 2012, and forwarded to the contract officer. The contracting officer approved the subcontract for T&D to the Delaware County Solid Waste Authority Rolling Hills Landfill on April 26, 2012. EPA continues to work on the profile acceptance and approval, which may take up to two weeks.

A clarified T&D bid for hazardous soil (D040) was re-issued on March 30, 2012, based upon the information that select hazardous material on-site requires treatment due to extremely high TCE levels, the hazardous material bid was cancelled and re-submitted to vendors clarifying volumes of material requiring treatment. The bid was received on April 5, 2012. The bid was evaluated and approved on April 10, 2012, with the completion and approval of CERCLA compliance checks on the proposed facilities. Waste profile sheets were submitted to the disposal facilities for acceptance on April 11, 2012. Numerous profile re-visions clarifying underlying hazardous constituents have been provided to the disposal facility to support disposal acceptance. EPA has received approval and has scheduled shipment of the hazardous waste for May 3- 4, 2012 to Wayne Disposal, Inc., Belleville, MI. for

hazardous waste (not requiring treatment), and Michigan Disposal, Inc., Belleville, MI (requiring treatment before disposal).

During the week of April 9, 2012, EPA sent representative samples of the "dark green material", uncovered from excavation activities, which is uncharacteristic of the material profiled to-date for analysis. Data should be received on Tuesday, April 17, 2012. This material was segregated from the other non-hazardous waste material until analysis was received.

EPA received, on April 17, 2012, analytical results of the "dark green material", uncovered from excavation activities, which appeared to be uncharacteristic of the material profiled to-date. Data received indicates the material is consistent with the non-hazardous material profiled.

EPA sampled the proposed vendor clean backfill on April 4, 2012, and received data which confirmed they meet EPA standards for clean fill. Re-analysis was requested by the Site RPM due to slightly elevated arsenic levels.

ERRS continued excavation and stockpiling of soil from Trench Area D (pit #1-2). Excavation operations in these areas have indicated contamination at depths approaching 20 ft. to bedrock, and being more widespread.

During the period between May 3 and May 4, 2012, approximately 195 tons of hazardous material (not requiring treatment) was shipped to Wayne Disposal, Inc., Belleville, MI, for disposal. This completes T&D of this waste stream.

On May 4, 2012, approximately 158.72 tons of hazardous material (requiring treatment) was shipped to Michigan Disposal, Inc., Belleville, MI, for treatment and disposal. This completes T&D of this waste stream.

During the period between May 7 and May 18, 2012, approximately 6,400 tons of non-hazardous material was shipped to the Rollings Hills Landfill, Boyertown, PA. This completes T&D of this waste stream.

On Friday, May 11, 2012, during backfilling and re-grading operations of Trench D with a dozer, material was found seeping to the surface in the extreme northern portion of Trench D. A narrow trench (< 6 ft wide) was found with deteriorated drums which continued to the tree line. Excavation of soil in Trench Area D was completed on May 15, 2012.

Continued results of RST perimeter and site operation air sampling indicate non-detect (@ .5 ug/m³) for volatiles organics along the Site perimeter. Operations (i.e., excavation) air data continue to indicate levels up to 3 ug/m³ for TCE and 20 ug/m³ for total VOCs (chlorobenzene, cis-dichloroethene, xylenes, toluene, etc.).

2.2.1.1 Planned Response Activities

ERRS completed excavation and T&D activities from all trenches.

2.2.1.2 Next Steps

Re-grading and restoration activities continue in all trenches areas. With the completion of excavation and T&D activities, EPA closed out all air sampling operations

ERRS was directed to begin decontamination of all non-essential equipment in preparation for demobilization.

The hydroseeding contract was issued but delayed until June 26, 2012 due to a period of heavy rains which washed out certain trench areas and prevented re-grading due to excessive mud and water.

Re-grading was completed in all areas and hydroseeding was completed on June 28, 2012.

During the week of July 23, 2012, EPA received copies of all certificates of treatment and disposal from all disposal facilities.

2.2.2 Issues

Access to the PSE&G right-of-way to excavate directly beneath their 500kV transmission line is an extremely hazardous operating environment which will require special operating conditions as defined by OSHA regulation 1910.333 and access agreement.

On June 13, 2012, a site walk was performed with local government representatives, community advisory group, and EPA remedial representatives. The site work was well received by all.

2.3 Logistics Section

All logistics, including work offices, lighting, and equipment will be provided by EPA and/or its contractors.

2.4 Finance Section

2.4.1 Narrative

On September 29, 2011, EPA approved allocation of funding for the excavation and off-site transportation and disposal of TCE contaminated soil. The funding listed below includes await costs for equipment, analytical, lodging & per diem, materials anticipated for a 3 month operations period and T&D, which is subject to change.

On March 13, 2012, a contract modification (#2) for a ceiling increase of \$500,000 was received.

On March 22, 2012, a contract modification (#3) for a ceiling increase of \$500,000 was received.

On April 26, 2012, a contract modification (#4) for a ceiling increase of \$250,000 was received.

On August 8, 2012, a contract modification (#5) for a ceiling decrease of \$160,000 was received.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety is the most important part of every project and EPA is committed to providing a safe working environment for all personnel on-Site. EPA is also committed to ensuring the safety and health of residents living near removal excavation activities and those utilizing the area for recreational purposes (i.e., bike path). EPA will work with the residents and local government of Byram Township in an effort to have an informative and complaint-free project.

On March 15, 2012, EPA-RAB (Greg DeAngeles) and ERT (Brian Kovak) safety officers performed a safety audit of site operations.

2.5.2 Liaison Officer

The EPA On-Scene Coordinator will continue to work closely with the representatives of Byram Township, surrounding local communities and other sections of EPA Region II.

2.5.3 Information Officer

At this time the dissemination of public information (i.e., fact sheets, newspaper postings, etc) are being handled by the EPA OSC and Public Affairs.

3. Participating Entities

3.1 Unified Command

Although Unified Command is not necessary for this project, EPA is working with various local departments within Byram Township and surrounding local communities.

3.2 Cooperating Agencies

The Township of Byram, NJDEP, and other local and state entities are working together to provide a successful completion of this excavation project.

4 Personnel On Site

EPA initiated mobilization to the Site with ERRS personnel, including a Response Manager, Field Accountant, Foreman, Operators (2), and Cleanup technicians (2).

EPA will be supported by the U.S. Coast Guard - Strike Team through an Interagency Agreement for health & safety support and site monitoring.

The Removal Support Team (RST) will be providing technical support in site sampling and documentation.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

Scott, Martha

From: Grunstra, William
Sent: Monday, December 31, 2012 10:10 AM
To: * All ED2 Addresses *; Amend-Babcock, Laura; Feick, Nelson E.
Subject: Monthly Report

Please submit your December monthly report write-ups to your Group Leaders by Friday, January 4th. The period is from 24 November through 28 December, (5 weeks).

Thanks, Bill.